Attachment A

to

RFP No. 4488

Mississippi Department

Of Human Services

Critical Case and Eligibility Systems and Software (SUCCESS)

ITS Project No. 47212

Table of Contents

1. Executive Summary

Summarize the contents of the proposal in the Executive Summary. The purpose of the Executive Summary is to provide the MDHS Evaluation Team with a broad but clear understanding of the entire proposal, emphasizing any unique aspects or strengths of the Vendor and proposal. The Executive Summary must confirm that the Vendor will comply with all provisions and requirements in this RFP.

2. Vendor Company Information, Qualifications, and Experience

2.1. Vendor Company Information

This section should include a description of the Vendor's organization, including primary business location(s), size, areas of specialization and expertise, customer base, and any other pertinent information that would aid an evaluator in formulating a determination about the qualifications, stability, and strength of the Vendor, as well as the value and commitment of the Vendor as a resource to the MDHS. Include an organizational chart for the Vendor's organization.

2.2. Vendor Qualifications and Experience

Vendors must meet the mandatory minimum qualifications listed in this section. The Vendor must indicate and demonstrate fulfillment of each of the following minimum requirements:

2.2.1. A minimum of five (5) years of health and human services experience

2.2.2. A minimum of five (5) years of experience with implementing systems of similar size and scope within the last five (5) years

2.2.3. A minimum of five (5) years of experience providing similar services to those requested in this RFP (e.g., design development and implementation [DDI], systems integration [SI], project management, etc.)

2.2.4. Experience implementing IT solutions in compliance with federal rules and regulations (e.g., Food and Nutrition Service [FNS], Office of Child Support Enforcement [OCSE])

2.3. Vendor Financial Information

2.3.1. Dun and Bradstreet Report

Vendors with a Dun and Bradstreet number must include a Comprehensive Insight Plus Report, Business Information Report, or Credit Evaluator Report as part of their proposal.

2.3.2. Financial Capacity and Annual Report Information

The Vendor shall submit an annual report, which must include:

- Last three (3) years of audited financial statements

- If applicable, last two (2) years of consolidated statements for any holding companies or affiliates

- An un-audited financial statement for the most recent quarter of operation

- A full disclosure of any events, liabilities, or contingent liabilities that could affect Vendor's financial ability to perform this Contract

If the Vendor is unable to provide the annual report specified above, the Vendor may, at the discretion of MDHS, provide the following annual report:

- Last five (5) years unaudited financial statements or a balance sheet statement of financial position

- An un-audited financial statement of the most recent quarter of operation

- A full disclosure of any events, liabilities, or contingent liabilities that could affect Vendor's financial ability to perform this Contract

2.4. Prior Contract Performance

The Vendor's proposal shall respond to the following:

- The Vendor shall submit full details of all contracts it has executed or been involved in (e.g., as a subcontractor to another vendor) with the State of Mississippi within the last four (4) years, including the other party's name, address, email address, and telephone number. The Vendor shall specify any projects that are not on track or for which the delivery schedule and/or scope has been adjusted since Contract execution.

- The Vendor shall submit full details of all contracts that have been terminated for either default, such that payment proceedings and/or execution on a letter of credit, payment, performance, or bid bond have been undertaken, or convenience within the last four (4) years. The Vendor must include the other party's name, address, email address, telephone number, and brief description of the termination.

- The Vendor shall submit a brief description of any significant pending legal and administrative proceedings in any jurisdiction in which the Vendor, its officers, directors, employees, or principals or any of its affiliates or parent(s), their officers, directors, employees, or principals is a party or of which any of their property is subject. Include the name of the court or agency in which the proceedings are pending, the date instituted, the principal parties thereto, and a description of the factual basis alleged to underlie the proceedings. Notwithstanding the foregoing, the Vendor shall submit information concerning any claim or allegation which brings into question the Vendor's performance or failure to perform.

- The Vendor shall submit a brief description of any occasion in which the Vendor, any officer or principal of the Vendor with a proprietary interest therein, has ever been disqualified, removed, or otherwise prevented from bidding on, participating in, or completing a federal, state, or local governmental project because of a violation of law or a safety regulation.

- The Vendor shall submit a list of all material threatened and/or pending claims, litigation, judgments, or settlements and government enforcement actions.

- The Vendor shall identify whether the Vendor or any of its officers refused to testify or waive immunity before any state or federal grand jury relating to any public project within the last ten (10) years. If so, provide details.

If multiple organizations are participating (e.g., affiliates, parent companies, and/or Subcontractors), the information requested herein shall be provided regarding each of the respective organizations.

3. Proposed Services

3.1. Overall Strategy and Approach

Provide a narrative explaining the intended approach to delivering the services and meeting the requirements described in this RFP. Include the proposed high-level

processes, practices, and methodologies for providing all components of the requested services.

3.2.   Proposed Staffing Approach

The Vendor's response to Item 16.1, Staffing Requirements will consist of the following five (5) primary components. MDHS encourages Vendors to propose a staffing approach to deliver the services outlined in this RFP and to fulfill the vision described in Attachment A, Item 14, Procurement Goals and Objectives.

3.2.1.   Vendor Assumptions to Staffing Requirements

Using the table format shown in Table F.1, the Vendor shall identify key assumptions—including assumptions regarding MDHS staff, technical, or other resources—related to the Vendor's proposed staffing approach. If the Vendor has not made any assumptions, the Vendor shall respond with "No assumptions have been made."

Table F.1: Format for Vendor Assumptions for Staffing Requirements

Assumption	Reason(s) for Assumption

3.2.2.   Staffing and Organization

The Vendor shall provide a high-level narrative description of the overall staffing organization, roles, and team(s). This description shall include how the roles and team(s) will integrate with the MDHS and its vendor teams (e.g., Project Management Office [PMO], Organizational Change Management [OCM]). The narrative shall clearly indicate how the proposed team(s) will address the services and tasks provided in this RFP. The response shall demonstrate the Vendor's ability and capability to provide knowledgeable, skilled, and experienced personnel to accomplish the scope of work as described in this RFP.

The Vendor shall provide an organizational chart that clearly depicts the Vendor's proposed team with key personnel clearly designated using the words "Key Personnel". Names shall also be provided for staff who are not deemed as key staff but who are being proposed as part of the team.

3.2.3. Key Personnel

The Vendor is required to provide dedicated key personnel for the project. Key personnel are defined as staff who are contractually essential and have lead responsibilities for performing the scope of work.

The Vendor must name the individual proposed for each key personnel role in its proposal. Key personnel submitted in the Vendor's proposal are assumed to be committed to the project should the Vendor be awarded the Contract, pending MDHS approval of the staff member(s). MDHS reserves the right to approve/deny key staff included in the proposal.

The Vendor shall provide resumes for all key staff. Resumes must demonstrate experience of key staff that is germane to the role proposed. Resumes shall include the staff member's work on projects cited under the Vendor's experience provided in response Section F. Vendor Company Information, Qualifications, and Experience, as well as the individual's specific functions performed on such projects. Each resume must include the following details in the order specified:

- Proposed role

- Summary of relevant experience and knowledge specific to the responsibilities of their role and the services being requested in this RFP

- Professional employment history with dates

- Professional certifications

- Education (degrees received and major studies)

Resumes shall be included as an appendix to the Vendor's proposal. The appendix shall be referenced in the body of the proposal and clearly labeled in this section of the proposal.

3.2.4. Staff and Subcontractor Management

The Vendor shall describe its approach to personnel management, including:

3.2.4.1. Hiring—including the Vendor's plan for recruiting for and filling roles unfilled at the time of submission of the Vendor's proposal—and termination

      3.2.4.2. Initial and ongoing staff training—including transfer of project status, business and system knowledge, and project management methodologies and processes to new staff

      3.2.4.3. Staff performance monitoring

      3.2.4.4. Succession planning, staff replacement, and staff backup

      3.2.4.5. Sourcing of staff

      3.2.4.6. Retaining staff and ensuring continuity of staff for the duration of the project

      3.2.4.7. Managing Subcontractors

3.2.5. Acceptance of/Exceptions to Staffing Requirements

The Vendor must respond with "WILL COMPLY" or "EXCEPTION" to each staffing requirement. "WILL COMPLY" indicates that the Vendor can and will adhere to the requirement. If the Vendor cannot respond with "WILL COMPLY", then the Vendor must respond with "EXCEPTION" and provide an explanation of the exception using the table in Section V:PROPOSAL EXCEPTIONS in the RFP document.

4. Proposed Approach to General Services

The Vendor's response to the requirements in Item 15, General Services will consist of the following five (5) primary components. Instructions for how the Vendor shall respond are provided for each component.

4.1. Vendor Assumptions for General Services

Using the table format shown in Table F.3, the Vendor shall identify key scope, schedule, and other assumptions—including assumptions regarding the MDHS staff, technical, or other resources—related to the Vendor's proposed approach to fulfilling the service requirements. If the Vendor has not made any assumptions, the Vendor shall respond with "No assumptions have been made."

Table F.3: Format for Vendor Assumptions for General Services

Assumption	Reason(s) for Assumption

4.2.   Narrative Response to Project Management Requirements

The Vendor shall provide an overview of its approach to delivering project management services and meeting the requirements outlined in Item 16.2, Project Management Requirements in this RFP. The responses may include how the Vendor will deliver the specified services, best practices that the Vendor will apply, templates that the Vendor will leverage, deliverables that the Vendor will provide to demonstrate the requirement is being met on an ongoing basis, and mechanisms that the Vendor will use to track and report service outputs to MDHS. As applicable, the Vendor shall indicate if and how it can exceed the requirements as described in each section.

4.3.   Narrative Response to OCM Requirements

The Vendor shall provide an overview of its approach to delivering OCM services and meeting the requirements outlined in Item 16.3, OCM Requirements in Attachment A. The responses may include how the Vendor will deliver the specified services, best practices that the Vendor will apply templates that the Vendor will leverage, deliverables that the Vendor will provide to demonstrate the requirement is being met on an ongoing basis, and mechanisms that the Vendor will use to track and report service outputs to MDHS. As applicable, the Vendor shall indicate if and how it can exceed the requirements as described in each section.

4.4.   Narrative Response to Supporting Tools Requirements

The Vendor shall provide an overview of the tools that the Vendor will provide to support the delivery of services outlined in this RFP.

4.5.   Acceptance of/Exceptions to General Services

The Vendor must respond with "WILL COMPLY" or "EXCEPTION" to each general requirement. "WILL COMPLY" indicates that the Vendor can and will adhere to the requirement. If the Vendor cannot respond with "WILL COMPLY", then the Vendor must respond with "EXCEPTION" and provide an explanation of the exception using the table in Section V: PROPOSAL Exceptions in the RFP document.

5. Proposed Approach to DDI Services

The Vendor's response to the requirements in Item 17, DDI Services will consist of the following five (5) primary components. Instructions for how the Vendor shall respond are provided for each component.

5.1.   Vendor Assumptions for DDI Services

Using the table format shown in Table F.5, the Vendor shall identify key scope, schedule, and other assumptions—including assumptions regarding the MDHS staff, technical, or other resources—related to the Vendor's proposed approach to fulfilling the DDI requirements. If the Vendor has not made any assumptions, the Vendor shall respond with "No assumptions have been made."

Table F.5: Format for Vendor Assumptions for DDI Services

Assumption	Reason(s) for Assumption

5.2.   Narrative Response to System Requirements

The Vendor shall provide a high-level overview of the proposed solution that aligns with the MDHS conceptual system design and will satisfy the functional and technical requirements defined in Attachment B – MDHS System RTM. This section of the proposal should also include:

- The Vendor's proposed implementation phases (e.g., the delivery of technology and functionality for program areas) and timelines for each phase

- The Vendor's proposed approach to meeting Federal Compliance and Certification Requirements.

5.3.   Response to MDHS System RTM

The Vendor must complete the template provided in Attachment B – MDHS System RTM and submit it as a Microsoft (MS) Excel file as part of its proposal. Instructions for completing the response to the MDHS System RTM can be found in the worksheet labeled as "1. Instructions" in the MS Excel file.

5.4.   Narrative Response to Tasks

The Vendor shall provide an overview of its approach to delivering each of the tasks provided in Item 17.5 - Item 17.13 of Attachment A. The responses may include how the Vendor will deliver the specified services, best practices that the Vendor will apply, templates that the Vendor will leverage, deliverables that the Vendor will provide to demonstrate the requirement is being met on an ongoing basis, and mechanisms that the

Vendor will use to track and report service outputs to MDHS. As applicable, the Vendor shall indicate if and how it can exceed the requirements as described in each section. The narrative responses shall be included within the body of the Vendor's proposal, and each response shall be clearly labeled with task name (e.g., "Task 1: Requirements Analysis and System Design", "Task 3: Data Conversion and Migration").

5.5. Acceptance of/Exceptions to DDI Services

The Vendor must respond with "WILL COMPLY" or "EXCEPTION" to each DDI requirement. "WILL COMPLY" indicates that the Vendor can and will adhere to the requirement. If the Vendor cannot respond with "WILL COMPLY", then the Vendor must respond with "EXCEPTION" and provide an explanation of the exception using the table format shown in Section V: PROPOSAL EXCEPTIONS in the RFP document.

6. Proposed Approach to SI Services

The Vendor's response to the requirements in Item 18, SI Services will consist of the following three (3) primary components. Instructions for how the Vendor shall respond are provided for each component.

6.1. Vendor Assumptions for SI Services

Using the table format shown in Table F.7, the Vendor shall identify key scope, schedule, and other assumptions—including assumptions regarding the MDHS staff, technical, or other resources—related to the Vendor's proposed approach to fulfilling the SI requirements. If the Vendor has not made any assumptions, the Vendor shall respond with "No assumptions have been made."

Table F.7: Format for Vendor Assumptions for SI Services

Assumption	Reason(s) for Assumption

6.2. Narrative Response to SI Services

The Vendor shall provide an overview of its approach to delivering each of the tasks provided in Item 18, SI Services of Attachment A. The responses may include how the Vendor will deliver the specified services, best practices that the Vendor will apply, templates that the Vendor will leverage, deliverables that the Vendor will provide to

demonstrate the requirement is being met on an ongoing basis, and mechanisms that the Vendor will use to track and report service outputs to MDHS. As applicable, the Vendor shall indicate if and how it can exceed the requirements as described in each section. The narrative responses shall be included within the body of the Vendor's proposal.

6.3.   Acceptance of/Exceptions of SI Services

The Vendor must respond with "WILL COMPLY" or "EXCEPTION" to each SI requirement. "WILL COMPLY" indicates that the Vendor can and will adhere to the requirement. If the Vendor cannot respond with "WILL COMPLY", then the Vendor must respond with "EXCEPTION" and provide an explanation of the exception using the table format shown in Section V: PROPOSAL EXCEPTIONS in the RFP document.

7. Proposed Approach to Operations and Maintenance (O&M) Services and Enhancements

The Vendor's response to the requirements in Item 19, O&M Services and Enhancements will consist of the following three (3) primary components. Instructions for how the Vendor shall respond are provided for each component.

7.1.   Vendor Assumptions for O&M Services and Enhancements

Using the table format shown in Table F.9, the Vendor shall identify key scope and other assumptions—including assumptions regarding the MDHS staff, technical, or other resources—related to the Vendor's proposed approach to fulfilling the O&M services and requirements. If the Vendor has not made any assumptions, the Vendor shall respond with "No assumptions have been made."

Table F.9: Format for Vendor Assumptions for O&M Services and Enhancements

Assumption	Reason(s) for Assumption

7.2.   Narrative Response to O&M Services and Enhancements

The Vendor shall provide its detailed approach to delivering O&M services and enhancements. The response may include how the Vendor will deliver the specified services, best practices that the Vendor will apply, deliverables that the Vendor will provide to demonstrate the requirement is being met on an ongoing basis, and

mechanisms that the Vendor will use to track and report service outputs to MDHS. This section of the proposal should demonstrate the Vendor's proposed approach to:

- Defect remediation

- Production support

- Help desk support

- Software upgrades

As applicable, the Vendor shall indicate if and how it can exceed the requirements as described in each section. The narrative responses shall be included within the body of the Vendor's proposal.

7.3.   Acceptance of/Exception to O&M Services and Enhancements

The Vendor must respond with "WILL COMPLY" or "EXCEPTION" to each O&M requirement. "WILL COMPLY" indicates that the Vendor can and will adhere to the requirement. If the Vendor cannot respond with "WILL COMPLY", then the Vendor must respond with "EXCEPTION" and provide an explanation of the exception using the table format shown in Section V: PROPOSAL EXCEPTIONS in the RFP document.

8. Proposed Approach to Transition Out Services

The Vendor's response to the requirements in Item 20, Transition Out Services will consist of the following three (3) primary components. Instructions for how the Vendor shall respond are provided for each component.

8.1.   Vendor Assumptions for Transition Out Services

Using the table format shown in Table F.11, the Vendor shall identify key scope, schedule, and other assumptions—including assumptions regarding the MDHS staff, technical, or other resources—related to the Vendor's proposed approach to fulfilling the transition out services and requirements. If the Vendor has not made any assumptions, the Vendor shall respond with "No assumptions have been made."

Table F.11: Format for Vendor Assumptions for Transition Out Services

Assumption	Reason(s) for Assumption

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8.2. Narrative Response to Transition Out Services

The Vendor shall provide its detailed approach to delivering transition out services. The response may include how the Vendor will deliver the specified services, best practices that the Vendor will apply, deliverables that the Vendor will provide to demonstrate the requirements are being met, and mechanisms that the Vendor will use to track and report service outputs to MDHS. As applicable, the Vendor shall indicate if and how it can exceed the requirements as described in each section. The narrative responses shall be included within the body of the Vendor's proposal.

8.3. Acceptance of/Exception to Transition Out Services

The Vendor must respond with "WILL COMPLY" or "EXCEPTION" to each transition out requirement. "WILL COMPLY" indicates that the Vendor can and will adhere to the requirement. If the Vendor cannot respond with "WILL COMPLY", then the Vendor must respond with "EXCEPTION" and provide an explanation of the exception using the table format shown in Section V: PROPOSAL EXCEPTIONS in the RFP document.

9. Acceptance of/Exception to Service Level Agreements (SLAs)

In response to Item 21, SLAs, the Vendor must respond with "WILL COMPLY" or "EXCEPTION" to each SLA. "WILL COMPLY" indicates that the Vendor can and will adhere to the requirement. If the Vendor cannot respond with "WILL COMPLY", then the Vendor must respond with "EXCEPTION" and provide an explanation of the exception using the table format shown in Section V: PROPOSAL EXCEPTIONS in the RFP document.

10. Response to Deliverables

In response to Item 22, Summary of Contract Deliverables, the Vendor shall provide a complete list of all deliverables the Vendor intends on providing to MDHS over the duration of the Contract. This list shall include the deliverables listed in Table 28, Table 29, Table 30, and Table 31 in Item 22, Summary of Contract Deliverables and any additional deliverables the Vendor plans to deliver.

The Vendor must respond with "WILL COMPLY" or "EXCEPTION" to each transition out requirement. "WILL COMPLY" indicates that the Vendor can and will adhere to the requirement. If the Vendor cannot respond with "WILL COMPLY", then the Vendor must respond with "EXCEPTION" and provide an explanation of the exception using the table format shown in Section V: PROPOSAL EXCEPTIONS in the RFP document.

11. Scope of Work (SOW)

11.1.   Overview of Services Requested

MDHS is initiating this competitive bid to obtain one (1) qualified Contractor to provide DDI (including configuration) services to replace five (5) legacy IT systems with a modernized, integrated system (i.e., MDHS System) to support MDHS' Supplemental Nutrition Assistance Program (SNAP), Temporary Assistance for Needy Families (TANF), Child Care Payment Program (CCPP), and Child Support Enforcement (CSE) program areas. In addition, the Contractor will provide SI services to help ensure the integrations between subsystems function to meet the technical and program area needs.

The Contractor will provide O&M services for the MDHS System and integrations after implementation for a minimum of two (2) years after the last implementation phase.

11.2.   Assumptions for the SOW

Assumptions are premises about the business, policy, technical, and/or project environment that may influence the SOW and/or a Vendor's proposal to this RFP. Assumptions Vendors should consider when reviewing and responding to this RFP include:

- The MDHS System will:

    o   Include Modified Off-the-Shelf (MOTS) components, with source code that is available to the State and any vendors

    o   Be modular with components loosely coupled so they can be easily replaced over time

    o   Have the ability to host the modular components in any environment, including the State's public and/or private cloud environments

    o   Provide robust business continuity and disaster recovery architecture

    o   Use a single, integrated human services system using a cloud-native architecture with the ability to add modules for additional functionality or remove modules if required

    o   Employ a containerized, open-system vendor-agnostic platform

- o Employ elastic resource allocation to allow applications to dynamically respond to workload fluctuations

- o Use real-time data exchange and accommodate a mix of real-time, asynchronous near real-time, and batch processing

- o Improve overall system performance

- o Have integrated reporting, analytics, and machine learning

- o Reduce O&M costs

- MDHS has identified several technical assets, business assets, and resources that the department may use to support the MDHS System. The reused functionality contributes to cost avoidance, as MDHS has already invested in the items and may not need to fund DDI, O&M, or other expenses related to the costs, except for minor changes to accommodate the new system components. The following existing assets and resources are already maintained and operated by the State, will provide reused functionality in the MDHS System, and may not need to be re-procured:

  - o Common Web Portal (CWP) and MyMDHS Application – The MDHS modernized, integrated IT solution is expected to integrate with MDHS' current and future iterations of the Common Web Portal and the MyMDHS application.

    - ▪ MDHS is open to review the mobile app proposed by the Vendor and decide based on the functionality and ease of use of the Vendor's proposed mobile app.

  - o Call center and interactive voice response (IVR) – Customer service functions such as mailroom, call center, and IVR or conversational user interface (Chat Bot) will not be replaced. MDHS has a standing call center resource with an IVR. Chat Bot services are already in use and will be integrated with the new solution where necessary. When necessary, the MDHS System will integrate with, and collaborate to, support existing artificial intelligence Chat Bot functionality.

    - ▪ The MDHS System will be expected to integrate, as necessary, with the MDHS call center and IVR, including additional configuration changes.

- MDHS is open to review proposed Chat Bot functionality provided by the Vendor.

o Data warehouses and reporting platforms – Many existing databases, and some data warehouses and reporting platforms, will not be replaced.

- The Contractor will provide data services for the MDHS System but will need to integrate with those that exist currently in the State's domain. Integration of data services may be a function of the Contractor's SI staff.

o Address verification services – The existing address verification system provides services that are regulatory and compliant and have MDHS' desired functionality. A unique aspect of address verification services, Melissa Personator®, is in use to verify, correct, and append all client addresses, and it associates the individual with their respective address.

- The MDHS System will be able to interface with this service instead of passing it on, potentially increasing the cost for subscription service(s).

o Azure Single Sign-On (SSO) system – MDHS already has SSO capability. These services are already capable of being integrated using existing standards.

- The MDHS System is expected to integrate with and use the State's Azure SSO system.

o Enterprise Service Bus (ESB) –MDHS has an ESB that ties into some of the services intended for reuse.

- The MDHS System is expected to integrate with the MDHS ESB.

o Master Person Index (MPI) –As MPI is not fully implemented, MDHS is open to review the MPI module functionality provided by Vendors. The Vendor shall provide a solution for MDHS that is an industry-recognized third-party solution for Master Data Management (MDM) and help with MDHS' growing needs. The MPI could serve to bridge the Contractor's MDM and existing data requests the MPI can provide. The

MPI can also serve as a springboard for data conversion that is necessary for an MDM.

- o MS Office365 – MS Office365 is MDHS' existing email server used to send/receive email, and only send client messages in a secure format by default, logging email failures and virus scan rejections.

  - The MDHS System must provide, or integrate with, MS Office365, or with any other MDHS-approved office automation tools as determined by MDHS.

12. Project Background

12.1.   Project Overview

MDHS currently uses five legacy IT systems to operate its SNAP (including Disaster SNAP [DSNAP] and SNAP Employment and Training [SNAP E&T]), TANF, TANF Work Program (TWP), CSE, and the CCPP, as follows:

- Mississippi Automated Verification Eligibility Reporting Information Control System (MAVERICS)—manages eligibility determinations for SNAP and TANF; subsystems include DSNAP and SNAP E&T

- Jobs Automated Work System (JAWS)—manages TANF support services and TWP case management service for eligible recipients.

- Electronic Financial Interface Tracking System (eFITS)—an interface with the State's Electronic Benefit Transfer (EBT) contractor systems, eFITS provides deposits to a client's cash benefit card from multiple programs and reconciles the use of benefits

- Mississippi Enforcement and Tracking of Support System (METSS)—collects and maintains data on all CSE cases and performs automated functions pertaining to CSE activities

- Child Care Payment System (CCPS)—manages the CCPP within the Division of Early Childhood and Development (DECCD)

Although these legacy IT systems have supported MDHS' service delivery needs and allowed it to provide critical benefits to clients, MDHS seeks to implement a modernized, integrated IT solution to help achieve its project vision and goals.

In August 2021, MDHS began planning phase work to conduct an assessment and perform a feasibility study—required for federal funding approval—to gain a better understanding of the

approach to modernizing several legacy IT systems that provides the most benefit to MDHS stakeholders in a cost-effective manner.

Key Planning Phase activities include, but are not limited to, the following:

- Performing a current-state assessment and requirements' analysis to develop functional, technical, and other requirements for a modernized IT solution

- Identifying and analyzing the feasibility of alternatives to fulfill MDHS' needs based on established criteria, (e.g., ability to meet functional, technical, and other requirements; ability to achieve compatibility with State technical standards and other necessary software applications; and organizational, financial/cost, and operational impacts).

- Performing a cost benefit analysis for each potentially feasible alternative

- Aggregating information from the requirements analysis, alternatives analysis, and cost benefit analysis to develop a feasibility study for FNS and a streamlined feasibility study for OCSE

- Delivering a final presentation of the alternatives analysis and the recommended down-selected alternative to the MDHS Executive Steering Committee

- Developing and documenting a conceptual system design for the alternative selected by MDHS

12.2.   Project Organization, Roles, and Responsibilities

Figure 1 shows the MDHS SUCCESS project organization chart, including key State of Mississippi (State) and contractor positions/roles and their hierarchical relationships within the project team.

Figure 1: MDHS Project Organization Chart
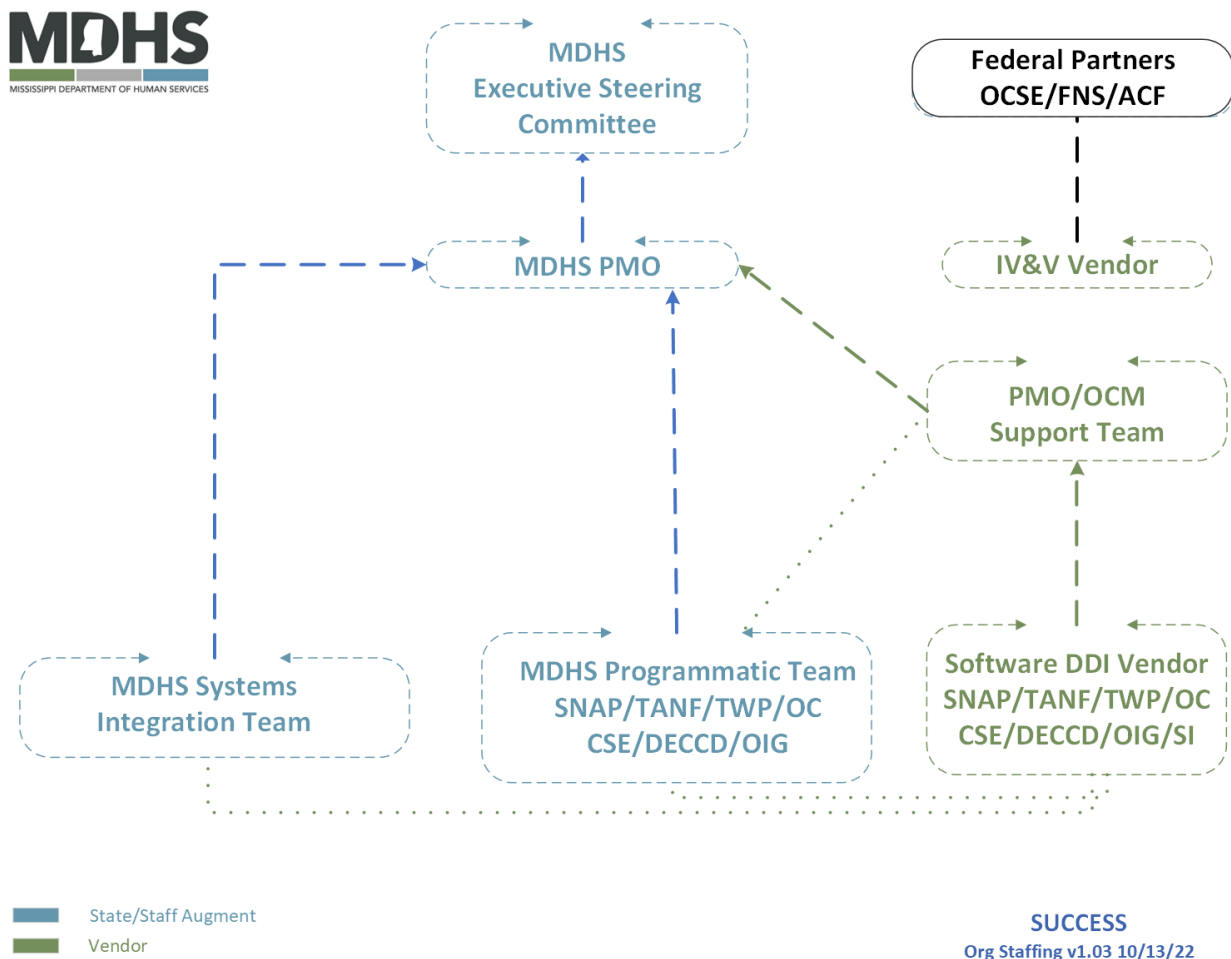
13. Current Environment

13.1.   Business Environment

MDHS is an umbrella agency within the State whose mission is "Offering Mississippians Young and Old Tangible Help Today to Create Lasting Hope for Tomorrow". MDHS is comprised of the following programmatic divisions that provide services to approximately 713,992 Mississippians:

- Aging and Adult Services

- Child Support Enforcement

- Community Services

- Early Childhood Care and Development

- Economic Assistance Eligibility

- Workforce Development and Partnership Management

- Youth Services

MDHS' leadership is responsible for incorporating policy and legislative decisions into all programs. MDHS leadership ensures program standards are upheld in accordance with federal and state policies and guidelines. Delivery of services involves partnerships between MDHS, community-based organizations, providers, individuals/families, and law enforcement. Figure 2 provides an overview of the MDHS programmatic divisions.

Figure 2: MDHS Programmatic Divisions[1]

MDHS

Adults & Seniors
- Area Agencies on Aging
- Adult Protective Services
- Family Caregiver Support Program
- MS access to Care Centers
- Services to Seniors
- State Health Insurance

Child Support Services
- Child Support Web-Based Bills/Notices
- Collection and Enforcement
- Determine Child Support Obligations
- Determine Paternity
- Employer Information
- License Suspension Program
- MS Access & Visitation

Community Services
- Community Services Block Grant
- Low Income Home Energy Assistance Program
- Weatherization Assistance

Early Childhood Care & Development
- Child Care Certification Program
- Child Care and Development Funding
- Healthy Homes Mississippi

Youth Services
- Community Services & Programs
- Probation & After Care Services
- Institutional Program & Services
- Oakley Youth Development Center
- Williams School

Workforce Development
- EDGE
- SNAP E & T
- Skills 2 Work
- TANF Work Program
- Workforce Innovation & Opportunity Act

Economic Assistance
- SNAP Program
- TANF Program
- TEFAP Program (Emergency Food Assistance Program)

The following subsections provide a high-level overview of the programs supported by the MDHS legacy IT systems in scope for replacement.

TANF

The TANF program is administered by MDHS' Division of Economic Assistance Eligibility as the single State Agency designated by State law for eligibility determination and spending authority. TANF has one full-service office for intake and client service delivery in each county with structured supervisory and regional administrative levels. Children under 18 years of age

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1 MDHS Program Organization Chart, 2021

and their parent(s) or other caretaker relative must meet all technical and financial eligibility requirements in order to qualify for a TANF benefit. Mississippi requires work-eligible individuals (adults or minor heads of household or non-recipient parents) receiving assistance under TANF to engage in allowable work activities once the State determines parents or caretakers are work eligible. Work-eligible individuals may not receive assistance under the program for more than 24 months (whether or not consecutive), unless they are engaged in allowable work program activities.[2] All adult household members applying for TANF must meet with an MDHS caseworker, comply with Vocational Rehabilitation services, or register for employment through Mississippi Works. TANF eligibility is contingent upon these requirements, although the work exemption may be granted to eligible adults.

In Mississippi, TANF monthly benefits and supportive service payments provided to individuals participating in allowable work activities or transitional programs are provided to the family by means of an EBT card. TANF supportive service payments issued to providers are paid by check, direct deposit, or by vouchers redeemable for services.

Under Mississippi House Bill 1090, The Medicaid and Human Services Transparency and Fraud Prevention Act, or "HOPE" ("Act to Restore Hope Opportunity and Prosperity for Everyone") Act, conferring Broad-Based Categorical Eligibility (BBCE) status to most benefit households is not permitted. Effective July 1, 2019, all families applying for TANF (new applications and redeterminations) are subject to an evaluation of all household resources.

TWP

TWP is administered by MDHS' Division of Workforce Development and Partnership Management and assists needy families to achieve self-sufficiency through employment and training activities. Upon referral to TWP, a caseworker develops an Employability Development Plan (EDP). The EDP describes the responsibilities of the client and entities performing case management. The plan also describes supportive services available to the client, lists the assigned work activity, and reinforces consequences for failure to participate. TANF supportive services include childcare and work related expenses to help adults prepare for employment.[3]

The MDHS uses JAWS to manage TANF work program requirements, client compliance and provide case management services. TANF also uses eFITS to manage, fund, and reconcile EBT

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2 Part 19 - [Effective 3/27/2020] DIVISION OF ECONOMIC ASSISTANCE TANF STATE PLAN, | Casetext Search + Citator

3 Ibid

accounts and transactions. Item 12, Project Background , Subsection, Technical Environment provides detailed system information.

SNAP

SNAP is a federally funded program administered by MDHS' Division of Economic Assistance Eligibility. SNAP supplements eligible low-income households to help ensure nutritional needs are met. Services offered are monthly allotments distributed electronically for individuals and families to purchase food . MDHS enters into agreements with approved SNAP retailers. The agreements authorize food providers to approve purchase of food items to eligible individuals. Approved SNAP purchases may be made at over 247,600 authorized retail locations around the country, including 3,100 located across the State.[4] Authorized retailers include grocery stores, participating farmers markets, and online retailers.

MDHS uses a web application to provide clients the ability to apply for services simultaneously (e.g., TANF, SNAP).[5] MDHS determines eligibility for the SNAP applicant and issues monthly benefits. Participants must comply with all requirements of the SNAP program in order to remain eligible. The MDHS website also offers web-based resources related to the SNAP application process, resources for retailers, and SNAP fraud information. The MDHS website connects consumers and retailers to:

- Online application forms and portals for individuals, including a prescreen application

- Information about document verification for eligibility

- *MyMDHS* Online, which allows individuals to apply for benefits, clients to renew benefits, check the status of their benefits, and report household changes

- Resources for retailers

- An online search tool to locate resources for online purchases

On October 1, 2021, MDHS increased pre-pandemic benefit levels as a result of the U.S Department of Agriculture's (USDA's) reevaluation of the Thrifty Food Plan. MDHS is increasing benefit levels by 21% so more Mississippians have access to healthier food options,

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4 https://www.cbpp.org/sites/default/files/atoms/files/snap_factsheet_mississippi.pdf

5 https://www.access.ms.gov/Application

and to reduce incidences of health-related issues stemming from limited access to nutritious food.[6]

SNAP uses the legacy IT system MAVERICS, a Statewide IT system, to manage SNAP initial and ongoing eligibility calculations and determinations. SNAP also uses eFITS to manage, fund, and reconcile electronic card payments and transactions. Item 12, Project Background Subsection , Technical Environment provides detailed system information.

DSNAP

MDHS is the State Agency that has primary responsibility for mass care, including housing and human services, during a disaster. As such, MDHS coordinates all State efforts to provide sheltering/temporary housing, feeding, and other human needs following a catastrophic earthquake, hurricane, or other significant disaster requiring mass care assistance. Mississippi's approach to disaster planning and response is based on the severity of the disaster established by USDA FNS' three-tier protocol as follows[7]:

- Level I: The disaster has a limited strike zone, limited number of victims, and no need for SNAP disaster declaration. Claims for food lost due to a household misfortune can be made at local offices, after the client signs an affidavit attesting to the loss.

- Level II: The disaster has a broader strike zone, moderate number of victims but still within a well-defined geographic area. SNAP ongoing certification system is adequate but may require some modification with FNS guidance. Some program requirements are waived for disaster victims.

- Level III: The disaster damage is catastrophic with large numbers of victims from all economic strata and there is widespread destruction of businesses and residences. A Presidential Disaster Declaration often accompanies this type of disaster. There is also coordination of effort with the Federal Emergency Management Agency (FEMA), Mississippi Emergency Management Agency (MEMA), and other federal, state, and local entities focused on emergency relief. Mississippi's approach to conducting the major disaster is controlled by the Declaration of Disaster as determined either by the Governor's Office or in coordination with the Governor's Office and the sponsoring Federal Agencies.

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6 https://www.mdhs.ms.gov/snap-benefits-increase-beginning-october-1/

7 USDA FNS SNAP Guidelines

DSNAP provides food assistance to low-income households with food loss or damage caused by disasters that fall within the definition of Level III. To be eligible, DSNAP recipients must reside in or be employed in a county that has been declared a federal disaster area. DSNAP clients access SNAP benefits with a specially designated disaster EBT card, issued to the applicant by the DSNAP application site card issuance cashier upon completion of the application process. In the event of a natural disaster, eligible counties authorize food assistance through DSNAP. Participating counties accept applications from residents affected by the disaster. Eligibility for DSNAP is also determined by SNAP caseworkers using DSNAP program criteria. Participants must comply with all requirements of DSNAP in order to be eligible.

The MDHS website is used to post information regarding DSNAP locations, hours of operation, and information required. In addition, Regional and County MDHS offices disseminate disaster-related material to best reach the affected population.[8]

An assessment of the technology available, based on the impact of the disaster, is made by MDHS executive management to determine DSNAP systems operability. Household members' data as well as approved and denied applications are collected in the DSNAP eligibility system; paper applications are scanned into the electronic file repository.

SNAP E&T

SNAP E&T is administered by MDHS' Division of Workforce Development and allows eligible SNAP recipients to participate in career and technical education programs and workforce skills training. SNAP E&T connects SNAP clients with work experience, short-term workforce skills training, and career/technical pathways. The Lead Agency, MDHS, determines eligibility requirements for the SNAP E&T program. Individual eligibility for the SNAP E&T program is determined by SNAP caseworkers. Participants must comply with all requirements of the SNAP E&T program in order to remain eligible.

Federal funds are leveraged by the Division of Workforce Development and Partnership Management to implement career and technical education programs and workforce skills training for low-income individuals. Workforce Development and Partnership Management enters into agreements with State agencies and community-based organizations across the State.[9]

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8 MDHS DSNAP Operations Plan

9 https://www.mdhs.ms.gov/workforce-development

CCPP

The Child Care Payment Program (CCPP) is administered by the Division of Early Childhood Care and Development within MDHS. The CCPP provides subsidized childcare to eligible Mississippi families through the issuance of certificates and allowing clients to select the approved provider of their choice*.*

MDHS enters into agreements with approved Child Care Providers. The agreements authorize the providers to offer services to eligible children and their families. Approved Child Care Providers include but are not limited to: 1) licensed childcare centers, 2) family childcare homes, and 3) in-home childcare providers. Individual eligibility for CCPP is determined by and payments are issued directly to Child Care Providers.

The 13 Child Care Resource and Referral (CCR&R) Network across the state staffed with early childcare professionals provide families with consumer education materials and assist parents with locating a childcare provider. All functions provided through the CCR&R Network are coordinated by DECCD and through partnerships . These R&Rs provide professional development, coaching, technical assistance, outreach, and services based on research and best practices to childcare providers. The R&Rs serve as the first point of entry for parents/families seeking information on programs and services, ranging from workforce and family programs to high-quality childcare services. The R&R Network also provides assistance with completing childcare applications and making referrals to local MDHS county offices for those families who are interested in applying for or would like additional information about another specific program(i.e., TANF, SNAP, or Healthy Families Mississippi).

The MDHS website offers web-based resources related to childcare providers' contact information, maximum enrollment, and age groups served. MDHS also gathers childcare provider data regarding supply and demand. The Child Care Payment System (CCPS) and the MDHS website connects consumers and providers to:

- A searchable database of licensed childcare providers in the State

- Online application forms and portals for multiple family-serving programs and subsidies (e.g., TANF, Head Start/Early Head Start, SNAP, Medicaid, etc.)

- Information about curriculum standards and childcare licensing requirements

- Best-practice research on early childhood development and learning

- Information about how to support children's social-emotional development and physical health

- Resources for school readiness and kindergarten transition

MDHS also has an online search tool that enables parents and the general public to locate subsidy-approved providers based on a variety of search criteria, including location, provider type, care type, and quality rating.

Child Support Enforcement

The Division of Child Support Enforcement enforces State and federal child support laws under MDHS. Services provided by the Child Support Enforcement Program include paternity establishment, location, and enforcement services, and the obtaining and modification of court orders. Cooperation with Child Support requirements serve as a condition of TANF eligibility, and appropriate TANF cases may be referred to the Child Support Enforcement Program.

MDHS enters into law-binding agreements and support orders with custodial and noncustodial parents and law enforcement agencies. The agreements authorize MDHS to enforce child support for impacted children. MDHS determines eligibility for child support and issues payments. Eligible and active child support cases have access to the following services:

- Location of noncustodial parent by searching all available local, State, and federal sources

- Paternity establishment, including in-hospital paternity acknowledgment, genetic investigation, signed acknowledgment, and court action as appropriate

- Establishment of a legally-enforceable child support obligation, including medical support when feasible, through court action

- Enforcement of a spousal support obligation for a spouse or former spouse who is living with the children, but only if a child support obligation has been established for the custodial parents and the child support obligation is being enforced

- Enforcement of the child and/or medical support obligation by initiating appropriate enforcement actions

- Periodic review of existing child support order to determine if the child support obligation is in accordance with State guidelines for setting child support obligations, and to determine if the criterion for seeking a modification is met

- Collection of private and divorce orders through MDHS

- Distribution of support payments in accordance with federal regulations and State-prescribed procedures

The MDHS website offers web-based resources related to parents and employers, and connects custodial parents to disbursement options such as:

- Mississippi prepaid card issued by Comerica

- Direct Deposit Authorization Agreement to personal checking account

Noncustodial parents have access to payment options such as:

- Payroll deduction

- PayNearMe locations accept cash payments; Mississippi currently has more than 25,000 trusted PayNearMe payment locations nationwide

- iPayOnline, a secure, easy method for individuals and employers to send child support payments to the State Disbursement Unit electronically

- Check, money order, and/or cashier's check

The MDHS website offers employers the following resource:

- iPayOnline, a secure, easy method for employers to send child support payments to the MS State Disbursement Unit electronically[10]

The Child Support Program uses METSS to implement Title IV-D program requirements, including an official statewide data repository for all child support case data. Item 12, Project Background Subsection, Technical Environment provides detailed system information.

In 2020, the MDHS reported 266,914 open and active child support cases.

13.2. Technical Environment

Overview of Technical Environment

MDHS maintains several IT systems for supporting critical State program areas, specifically SNAP—including DSNAP and SNAP E&T sub-modules—TANF, Child Support Program, and CCPP. IT systems that support these program areas were previously operational within a

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10 Child Support – Mississippi Department of Human Service (ms.gov)

mainframe environment and recently converted to a Linux-based environment. Supported IT systems are as follows:

- MAVERICS: A Natural/Common Business-Oriented Language (COBOL)-based system, accessed via Citrix and operating on Linux servers; used to manage Mississippi's SNAP, TANF, DSNAP, and SNAP E&T participants.

- JAWS: A Natural-based system, accessed via Citrix and operating on Linux servers; used to manage TANF work participation and case management duties for MDHS staff.

- eFITS: A Natural-based system operating on Linux servers; utilized to interface with State EBT systems.

- METSS: A Natural-based system operating on Linux servers; maintains data on all child support cases.

- CCPS: A Structured Query Language (SQL)-Server-based .NET system; used to manage the CCPP.

Although these IT systems offer a wide array of internal and external integrations (including CWP—a public-facing portal for SNAP, TANF, and Low-Income Home Energy Assistance Program [LIHEAP] eligibility—and the *myMDHS* mobile application), each system operates and is maintained independently of each other.

Figure 3 provides an overview of the current MDHS ecosystem.

Figure 3: The Current MDHS Ecosystem
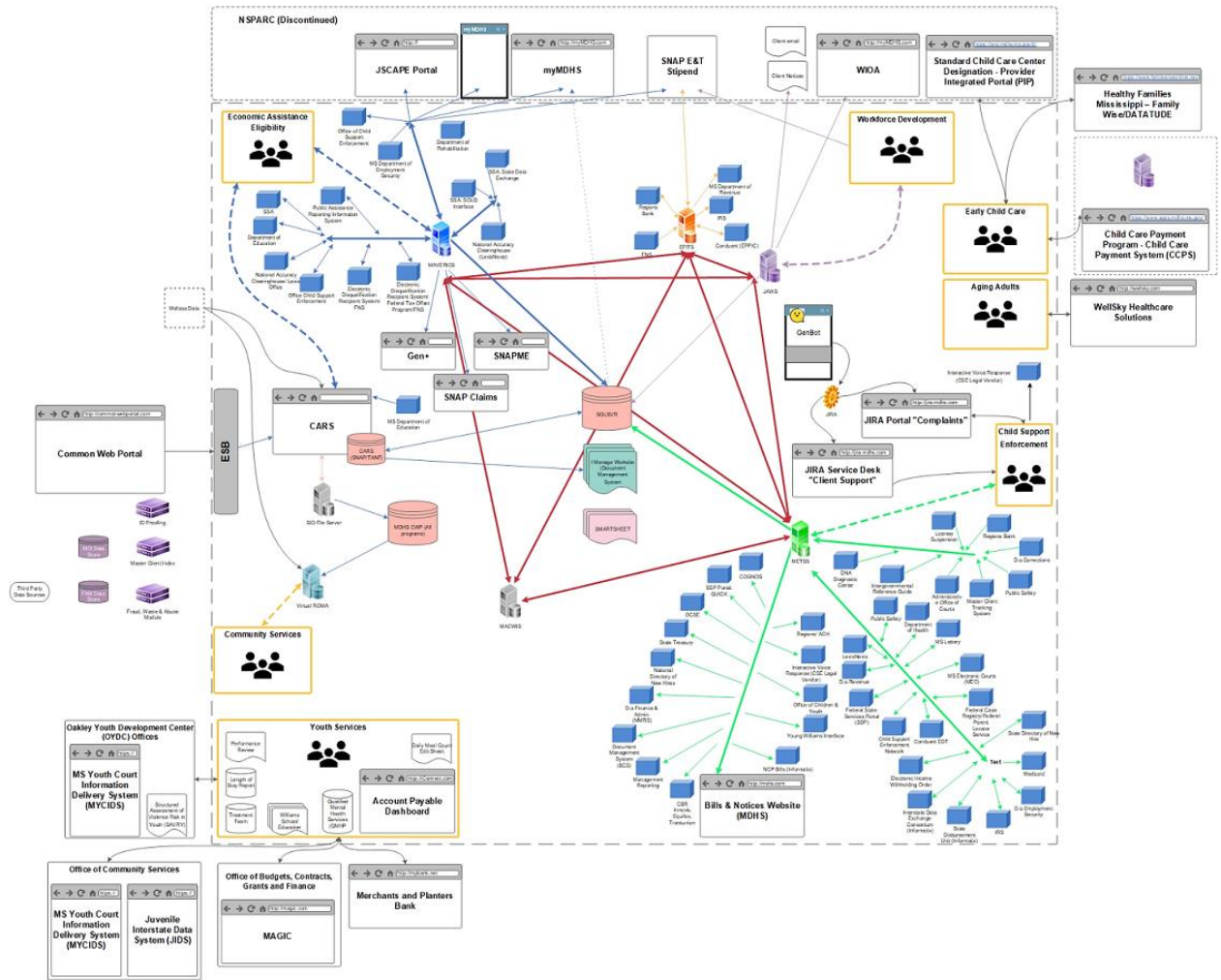
Management Information Systems (MIS) provides information system and technical support services to MDHS through support staff. MIS assists with reporting, managing user accounts, data management (e.g., merging/unmerging of records) and maintaining interfaces with internal and external systems. MIS is responsible for making any changes to the systems, based on MDHS' programmatic needs. MDHS data is housed in a data center, which is co-located in the same building as the primary data center, operated by the Mississippi Information Technology Services (ITS).

Overall, the underlying technical infrastructure and current functionality of the legacy IT systems negatively impact the long-term viability to support MDHS' program areas and present several challenges, including:

- **Strain on current IT resources to maintain and enhance the environment:** Upgrades occur during allowable Sundays, but roll-back can be extremely difficult and time-consuming when problems are encountered. MDHS IT staff must deal with multiple platforms and programming languages to make changes in the current IT systems. Due to the time involved in making these modifications, MDHS often must establish manual processes and/or new stand-alone IT systems to implement regulatory, policy, or procedural changes.

- **Cost and availability of experienced resources:** Technical resources who have experience with the Natural and COBOL programming language are scarce, generally expensive, and often unavailable.

- **Strain on users:** Users must log in to multiple IT systems, maintain multiple sets of credentials, and navigate through multiple menu-driven screens. Users routinely enter redundant data into more than one system, creating an opportunity for data errors and causing inefficient use of staff time and resources.

- **Complex user management:** While some solutions leverage Active Directory to authenticate, other applications maintain their own ID and passwords. With limited or no SSO capabilities, users can have difficulty maintaining their accounts and often have to reach out to the Help Desk for assistance with routine credentials and management requests.

- **Heavy Reliance on Citrix Connectivity:** Both MAVERICS and JAWS utilize Citrix, with routinely 650-680 Citrix sessions per day. Citrix has been plagued with performance issues that appear during peak times of usage, negatively impacting user productivity.

- **Lack of scalability and robustness of environment:** The current environment, although monitored, is not optimized for scale, nor is it load-balanced, often resulting in performance degradation when peak volume is reached. In addition, several databases are all used within the single environment, including Training, Quality Assurance (QA), and Help Desk, contributing to performance issues. In addition, applications run on a single server, which can further complicate the application delivery process.

- **Redundancy, disaster recovery, and general backup management:** Currently, MDHS legacy IT systems are hosted in the State hybrid cloud. The servers are part of a stretched vSAN cluster where a copy of each server is kept in two different data centers for redundancy and business continuity. In addition, general backups are run as part of a batch process, and full backups, as opposed to incremental backups, are generated nightly, contributing to further strain on performance and system usability.

- **Inconsistency in federal compliance, including security:** Since each legacy IT system utilizes unique code bases, they are often at different stages of federal compliance. MDHS seeks to modernize its IT systems to verify compliance with federal security and programmatic standards across programs, including Internal Revenue Service Publication 1075 (IRS-1075) and National Institute of Standards and Technology Special Publication 800-53 (NIST-800-53) Revision 5 (Rev. 5).

- **Lack of accessibility on modern, mobile devices:** Legacy IT systems are not accessible via mobile devices, including Android or iPhone Operating System (iOS). While MDHS has initiated the use of MS Intune for Enterprise Mobility Management, State systems are not accessible on such devices due to the underlying architecture and technology of legacy IT systems.

- **Lack of data governance model:** MDHS recognizes that a lack of data governance has a direct impact on data quality. Although a MPI exists, it is only used for disbursement of child support payments. A general MDM architecture does not currently exist, resulting in data duplication and data entry redundancy between programs.

- **Interoperability challenges:** To support programmatic needs, legacy IT systems are heavily dependent on IT system interoperability. Overall, interoperability efforts have been successful, e.g., MDHS recently implemented an in-house ESB to integrate solutions, including from the legacy IT systems to the CWP. However, the majority of interfaces use batch processes with few real-time exchanges, impacting timeliness of access to benefits and receipt of services. In addition, data quality between system integrations and process integrations are not consistent.

The following subsections provide high-level overview of each legacy IT system in scope for replacement.

MAVERICS

MAVERICS has been in use for over 30 years and is the Statewide IT system utilized to manage initial and ongoing eligibility calculations and determinations for SNAP, TANF, including DSNAP and SNAP E&T.

Converted from a mainframe environment, MAVERICS is a Natural and COBOL-based solution utilizing an adaptable database system (Adabas) framework within a Linux environment.

MAVERICS integrates with eFITS, METSS, CCPS and JAWS. In addition, MAVERICS is integrated with or used alongside several other in-scope solutions, including:

- Case Review System (CRS): An in-house .NET SQL Server system that provides access to cases for review. Information is populated via MAVERICS utilizing batch processing. Security for CRS is managed within the MAVERICS security tables.

- Client Application and Registration System (CARS): An in-house .NET SQL Server system that populates client application data via the CWP. Caseworkers manually review information in CARS for entry into MAVERICS. A web-services-based integration will be built in 2021 to transfer information from CARS to MAVERICS. Like CRS, security for CARS is managed within the MAVERICS security tables.

- SNAPME: An Angular-based .NET single-page application that provides users with read-only access to supervisory and reviewer reports and dashboards.

- SNAP Claims: The Monitoring and Administrative Hearing Team uses an in-house Adabas claims database. SNAP Claims uses both COBOL and Natural for overnight batch processing between SNAP claims and MAVERICS to review SNAP claims.

- iManage: A third-party document management system (formerly owned by Hewlett Packard) managed by BCS that stores reports from jobs run in MAVERICS. The system is heavily utilized by MDHS and delivers reports to users, manages alerts, and also leverages dashboard functionality. iManage notifies workers when actions are needed on a case and integrates with MAVERICS, JAWS, and METSS.

County users' access MAVERICS via Citrix, with authentication established via Active Directory. MAVERICS-specific, role-based security grants access to system menus based on division and job occupation. MAVERICS is a menu-driven application that leverages hotkeys (as opposed to more modern drop-down menus and pick-lists) to not only enter data, but to navigate from screen to screen. As a result, users often launch multiple instances of MAVERICS, with one instance used as a data entry tool and another used for reference, since the application lacks intuitive navigation between pages. In addition, users still rely on paper-based forms to manage caseloads and work tasks.

County workers have employed a wide array of workarounds to accommodate the system usability limitations. While MAVERICS is functional, the general consensus from stakeholders is that an updated user interface and underlying technology architecture would help maximize user efficiencies. Table 1 provides a summary of MAVERICS.

Table 1: MAVERICS Summary

Item	Description
Number of Users	Approximately 1,000
Technology	Linux environment employing an Adabas Framework. Languages utilized include Natural 8.3.8 and COBOL (Citrix-based) Authentication through Active Directory
Affiliated Systems and Interfaces	Examples include: eFITS; METSS; JAWS; JSCAPE Portal; *myMDHS*; CARS; CRS; iManage; ; SNAPME; SNAP Claims; Social Security Administration (SSA); Department of Education; National Accuracy Clearinghouse LexisNexis; OCSE; Electronic Disqualification Recipient System/FNS; Public Assistance Reporting Information System; Department of Rehabilitation; Mississippi Department of Employment Security

JAWS

JAWS has existed for over 20 years and is the Statewide IT system used to manage TANF eligibility and TANF Work Program (TWP) case management services. Primary individuals of participating households are required to participate in TWP, which seeks to assist with work skills training and job interviews, with the goal of obtaining self-sufficiency.

JAWS is a Natural-based solution utilizing an Adabas framework within a Linux environment that was previously converted from a mainframe environment. JAWS is tightly coupled with MAVERICS, utilizing the same hotkeys for navigation through the menu-driven system. The intake process originates in MAVERICS, which populates JAWS through an interface. JAWS assists with managing:

- Eligibility determination

- Tracking of activities and other case management functions

- Client notices

- Support Services

  o Child Care

  o Transportation stipends

o Work-related expenses

JAWS relies on legacy technology, which hampers scalability and system improvements. Its user interfaces are outdated and cumbersome. While the model relies on access to data from MAVERICS provided through interfaces, the data is imported via batches (rather than real-time), which often impacts its utility to workers using JAWS. Challenges with interfaces sometimes impact timeliness of processing TWP tasks. Table 2 provides a summary of JAWS.

Table 2: JAWS Summary

Item	Description
Number of Users	50 concurrent
Technology	Linux environment employing an Adabas Framework. Languages utilized include Natural 8.3.8. Citrix.
Affiliated Systems and Interfaces	MAVERICS; eFITS; METSS; WIOA portal; iManage

eFITS

The eFITS IT system is over 15 years old, is written in Natural, and runs within a Linux environment employing an Adabas framework. It is the Statewide IT system responsible for interfacing with the State's EBT contractor systems. eFITS provides deposits to a client's cash benefit debit card from multiple programs and reconciles benefit usage. eFITS integrates with all MDHS legacy IT systems including MAVERICS, JAWS, METSS, and CCPS. Using nightly processing, eFITS relies upon several methods for data transfer, including direct database access, Secure File Transfer Protocol (SFTP), and batch exchanges.

eFITS is directly accessed by five financial staff users to access a breakdown of client financial and benefit information. Aside from the legacy technology, there are no articulated gaps in system functionality for eFITS. Since outside contractors are used for the configuration and administration of eFITS, there is a lack of experience with the management of the eFITS IT system. Table 3 provides a summary of eFITS.

Table 3: eFITS Summary

Item	Description
Number of Users	5
Technology	Linux environment employing an Adabas Framework. Languages utilized include Natural 8.3.8.
Affiliated Systems and Interfaces	MAVERICS; METSS; JAWS; CCPS; Mississippi Automated Child Welfare Information System (MACWIS); Conduent (EPPIC): IRS; Regions Bank; FNS; iManage

METSS

METSS is the Statewide CSE system used to support the Title IV-D program for the State. METSS is over 20 years old and is OCSE-certified. METSS currently meets all federal OCSE requirements and supports all core CSE functions for the State, including:

- Case initiation (intake)

- Paternity establishment

- Locate

- Case management/case closure

- Enforcement remedies

- Financial management

METSS leverages numerous interfaces to gather information for locating noncustodial parents, processing new hires, enforcing license suspensions, and intercepting financial assets to recover nonpayment of child support. METSS is written in Natural and operates within a Linux environment. METSS is screen-driven, where users must collect specific information on certain screens in order to continue navigating through the system.

Role-based security grants access to the application based on job description. Users are given multiple roles, which determine the screens they can view and update. Security access is managed by the MDHS Security Unit, which manages security for all systems.

Reports are generated and distributed using the iManage solution. Numerous users also leverage International Business Machines (IBM®) Cognos for nightly and reporting against

METSS data. MDHS is currently in the early stages of transitioning from Cognos to the MS Power BI analytics solution. Table 4 provides a summary of METSS.

Table 4: METSS Summary

Item	Description
Number of Users	1,600
Technology	Linux environment employing an Adabas Framework. Languages utilized include Natural 8.3.8.
Affiliated Systems and Interfaces	Examples include: MAVERICS; eFITS; JAWS; FCR/FPLS, National Directory of New Hire (NDNH), SDNH, Child Support Enforcement Network (CSENet), Master Client Tracking System (MCTS), State Tax Intercepts; DOH, Medicaid, Public Safety, Credit Reporting Agencies, Employment Security, AOC, Mississippi Application and Reimbursement System (MARS), MACWIS, Regions Bank, Office for Children and Youth (OCY); iManage; IBM® Cognos; Bills & Notices Website; Foster Care

CCPS

CCPS is maintained by the Department of ITS. It was developed using .NET and uses a MS SQL Server database platform. The system leverages several interfaces to other data systems in the ecosystem and is tied to a public-facing web portal through which parents can apply for the program, add children to their records, and request a redetermination of eligibility. A provider-facing portal enables providers to report attendance and bill for services. The public-facing and provider-facing portals leverage SmartSheets technology, which may limit scalability. CCPS is linked through interfaces to several other State systems, most commonly using nightly batches, though some are real-time (e.g., address verification and payment data).

CCPS helps successfully manage several functions and workflows critical to operation of the CCPP, including:

- Application processing

- Re-certifications

- Modifications (e.g., adding children)

- Provider selections

- Client and Provider Notifications/Correspondences

- Retrieval of authorizations

- Attendance reporting/billing

- Document management

- Syncing with other State systems, including the childcare licensing system (LARS), CSE system (METSS), JAWS, and several others

CCPS is generally viewed by users as working well and is more modern than several other systems used within MDHS. CCPS supports approximately 6,000 monthly applications (including re-certifications), 19,000 active parental enrollments, and 1,400 providers statewide.

Future-state aspirations include mobile applications and expanded interfaces to additional systems to make more data accessible to State staff directly through the system, such as a childcare workforce registry. Table 5 provides a summary of CCPS.

Table 5: CCPS Summary

Item	Description
Number of Users	Currently 75 State staff users; scalable to 798 concurrent users
Technology	MS .NET, SQL Server
Affiliated Systems and Interfaces	SmartSheets web portal; integration to LARS – Licensing & Inspection System (DOH); Other MDHS Systems: MAVERICS, JAWS, MACWIS, Melissa Personator Application Programming Interface (API), United States Postal Service (USPS) ZIP Code; Regions Bank, MDHS: Payment interface, Office of Inspector General (OIG), Fraud, Recoupments

14. Procurement Goals and Objectives

In alignment with its mission, MDHS envisions having modernized, enterprise-wide IT systems that assist with the delivery of public assistance programs, social services, and other supports in a more efficient, effective, and timely manner.

MDHS also has a strong desire in furthering its mission of promoting self-sufficiency and personal responsibility for all Mississippians, and MDHS envisions modernized, enterprise-

wide systems that support the delivery of public assistance programs, social services, and other supports in a more efficient, effective, and timely manner. To accomplish its mission, Figure 4 below provides the project vision and goals established by MDHS leadership.

Figure 4: Project Vision and Goals
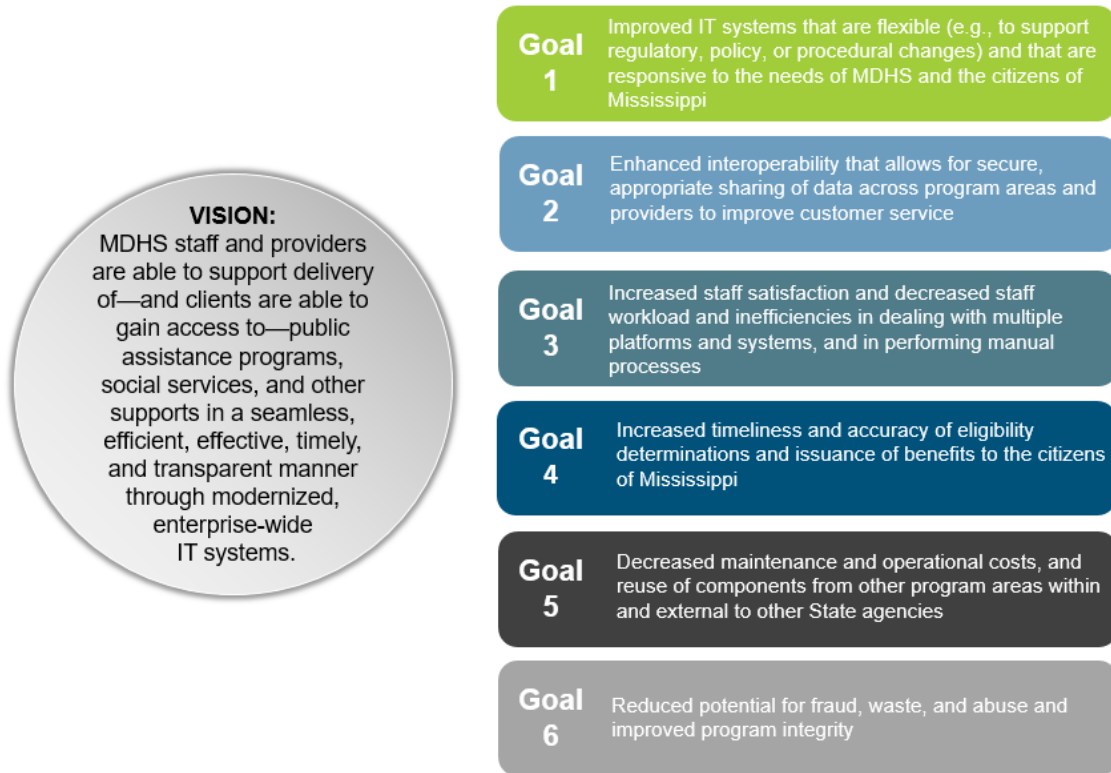
The future integrated IT solution should help to achieve several of MDHS' goals and objectives, as listed in Table 6 below.

Table 6: MDHS Goals and Objectives

Goals	Objectives
Improved IT systems that are flexible and that are responsive to the needs of MDHS and the citizens of Mississippi	✓ Automated eligibility and renewals with caseworkers notified of exceptions ✓ Automatic functions to reduce case processing time and increase program and data integrity by eliminating duplicate data entry

Goals	Objectives
	✓ Easily support regulatory, policy, or procedural changes
Enhanced interoperability that allows for secure, appropriate sharing of data across program areas and improves customer service	✓ Integration services layer allows for integrating with existing MDHS applications ✓ Allows for seamless integration across the State's enterprise (where allowed) ✓ Integrates with State, federal, and internal data sources and exchanges
Increased staff satisfaction and decreased staff workload and inefficiencies in dealing with multiple platforms and systems, and in performing manual processes	✓ Pre-configured workflows to maximize efficiency, increase staff productivity, and minimize errors ✓ Automation of notices and correspondences ✓ Improve analysis and decision-making ✓ Data exchanges to simplify verification and increase accuracy in eligibility and benefit determinations
Increased timeliness and accuracy of eligibility determinations and issuance of benefits to the citizens of Mississippi	✓ Leverages policy-based system rules to support consistent and accurate eligibility and benefit determinations ✓ Eliminates daily mundane and duplicate data entry tasks that often result in eligibility determination errors ✓ Complies with federal and State Regulations and technical foundation aligns with FNS and OCSE standards and certification requirements
Decreased maintenance and operational costs, and reuse of components from other program areas within and external to other State agencies	✓ Reduce O&M costs thorough use of modern and lasting technology ✓ Solution components will be owned by MDHS ✓ Solution is scalable and allows for extensibility to meet current and future MDHS goals and objectives
Reduced potential for fraud, waste, and abuse, and improved program integrity	✓ Eliminates integration with multiple disparate systems allowing for consistent and accurate client data utilized during benefit determination

Goals	Objectives
	✓ Integration with third-party data partners, resulting in more consistent and accurate eligibility determinations ✓ Streamlines highly accurate person and case clearances

15. Project Timeline and Phases

To help lower risk, provide earlier benefits to citizens and workers, and reduce annual funding requests, MDHS expects that the Contractor will provide a phased implementation approach that employs both technology-based and program-based phases for replacement of the five (5) legacy IT systems. The Contractor must complete all DDI and SI tasks within 36 months.

16. General Services

16.1. Staffing Requirements

Staffing requirements represent responsibilities of the Contractor for key personnel—those positions that are considered to be critical and essential to the effective management, performance, and success of the project—and subcontractors. The staffing requirements address the following domains:

- Staffing Model and Key Personnel

- Project Staffing Plan

- Subcontractors

- Work Locations

Detailed requirements for fulfilling staffing requirements are included in Table 7.

Table 7: Staffing Requirements

Req. ID	Requirement Description
	Staffing Model and Key Personnel
ST-01	The Contractor must fill key positions with qualified, experienced staff committed to the success of the project.

Req. ID	Requirement Description
ST-02	The Contractor must provide a sufficient mix of project staff with qualifications and experience to fulfill the requirements of the Contract.
ST-03	While MDHS has given the Contractor latitude on the staffing model and structuring of resources, the Contractor must provide a subject matter expert (SME) for each of the in-scope program areas (e.g., SNAP, TANF, Child Care, Child Support) throughout the project.
ST-04	The Contractor must not make any temporary or permanent changes to key personnel without at least three (3) weeks' prior notice to MDHS and MDHS' prior written approval.
ST-05	The Contractor must ensure that the replacement of staff is of equal or greater knowledge, skills, abilities, and experience. The Contractor must receive MDHS' approval prior to placing the replacement staff member on the project team. MDHS may also request a meeting with the proposed replacement before providing approval.
ST-06	With any key personnel change, the Contractor must submit the resume and references for a proposed replacement no later than fifteen (15) business days from notification of a resignation or request for removal, or within a time frame agreed upon by MDHS.
Project Staffing Plan	
ST-07	As a subsidiary plan of the Project Management Plan, the Contractor must provide a Project Staffing Plan, outlining the key personnel who will fulfill the services described in this RFP. The Project Staffing Plan must address the following: • Job title, qualifications, and descriptions for each staff position • Subcontractors and responsibilities, if necessary • Contractor service evaluation and progressive disciplinary policies • Plans for replacement of departing temporary and permanent staff • Updated organizational chart that shows the reporting structure and responsibilities of Contractor's and Subcontractor's staff, as applicable
ST-08	The Contractor must adhere to the MDHS-accepted Project Staffing Plan to ensure key personnel roles are filled at all times.
Subcontractors	

Req. ID	Requirement Description
ST-09	The Contractor must act as the single point of contact for MDHS with the Contractors' subcontractors for the services described in the Contract.
ST-10	The Contractor must ensure any subcontracts contain all appropriate flow-down provisions and requirements expressed in this RFP and in the resulting Contract, including but not limited to insurance, SLAs, confidentiality and nondisclosure, and data security.
ST-11	The Contractor must obtain MDHS approval for all subcontractors.
Work Location	
ST-12	The Contractor must identify the physical location of all work to be accomplished for all tasks in the proposed Project Work Plan and Schedule.
ST-13	The Contractor must make key personnel available on-site at MDHS' offices at least 50% of the time during the project or when requested. MDHS will provide requests a minimum of two (2) weeks in advance of expected on-site time.
ST-14	If the Contractor uses remote staff, the Contractor must implement adequate communication systems to support project team activities conducted during MDHS business hours, Monday through Friday, 8 a.m. to 5 p.m. Central Time. Remote staff must be located in the United States.

16.2. Project Management Requirements

Project management requirements represent responsibilities to be performed by the Contractor. The project management requirements address the following domains:

- Project Coordination

- Project Management Methodology and Project Management Plan

- Project Work Plan and Schedule

- Project Kickoff Presentation and Kickoff Meeting

- Project Reporting

- Change Control

- Deliverable Management

Detailed requirements for fulfilling project management responsibilities are included in Table 8.

Table 8: Detailed Project Management Requirements

Req. ID	Requirement Description
Project Coordination	
PM-01	The Contractor must coordinate services with other project contractors, such as an Independent Verification and Validation (IV&V) Contractor, OCM Contractor, and/or Project Management Contractor, should MDHS procure such services. Coordination includes, but is not limited to: • Participating in meetings led by the IV&V Contractor, OCM Contractor, and/or Project Management Contractor • Inviting participation of the IV&V Contractor, OCM Contractor, and/or Project Management Contractor in meetings led by the Contractor • Sharing project information (e.g., project management documents, test cases, test results) • Contributing to documents developed to by the IV&V Contractor, OCM Contractor, and/or Project Management Contractor
Project Management Methodology and Project Management Plan	
PM-02	The Contractor must develop, maintain, and execute a project management methodology that complies with PMI® and the most current edition of the *PMBOK® Guide* standards and processes.
PM-03	The Contractor must perform ongoing project management throughout the duration of the project, in alignment the approved project management methodology that complies with PMI® and the most current edition of the *PMBOK® Guide* standards and processes.
PM-04	The Contractor must develop and provide MDHS with a detailed Project Management Plan (D1). The Project Management Plan (D1) must include the following subsidiary sections and plans: • Project Background and Objectives • Project Staffing Plan • Project Team Structure • Scope Management Plan

Req. ID	Requirement Description
	• Schedule Management Plan • Requirements Management Plan • Change Control Plan • Risk and Issue Management Plan • Quality Management Plan • Communications Management Plan • OCM Plan • Project Deliverables and Milestones
PM-05	The Contractor must update the Project Management Plan (D1) as necessary (monthly at minimum) to accurately reflect changes that occur over the course of the project.
PM-06	The Contractor must monitor project risks, issues, and change requests and maintain up-to-date logs for each throughout the project.
Project Work Plan and Schedule	
PM-07	The Contractor must produce a detailed Project Work Plan and Schedule (D2) in MS Project or similar software, including a Gantt chart, based on project deliverables and milestones. The schedule will include tasks, dependencies between tasks, start and completion dates for each task, associated resources, and project milestones. The Project Work Plan and Schedule (D2) will include both high-level (rolled up) and detailed tasks to lead to project completion (i.e., a work breakdown structure), as well as planned on-site dates for the Contractor.
PM-08	The Project Work Plan and Schedule (D2) must contain appropriate version control to establish the initial baseline and changed versions. Subsequent Project Work Plan and Schedule (D2) updates must include the original baseline, as well as the current start and finish dates and the percentage completed for the activities. The Contractor must provide a rationale for changes to the baseline, and MDHS or its designee must approve changes using the formal change control process.
PM-09	In accordance with SLA01: Project Work Plan and Schedule, the Contractor must maintain the Project Work Plan and Schedule (D2) throughout the life of the project and update it as necessary (monthly at minimum) to accurately reflect the status of the project.
Project Kickoff Presentation and Kickoff Meeting	

Req. ID	Requirement Description
PM-10	For each project phase, the Contractor must provide a Kickoff Presentation (D3) that includes the following: • Contractor key personnel introductions • Roles and responsibilities • High-level overview of the Project Work Plan and Schedule (D2) • Overview of the project methodology and project management controls • Detailed description of the activities occurring over the next eight (8) weeks • Potential project risks, issues, and roadblocks • Expectations and task assignments for MDHS staff • Next steps
PM-11	The Contractor must prepare an agenda, a presentation in MS PowerPoint (or similar format), and supporting materials (as necessary), and must distribute all materials to attendees at least two (2) days prior to the meeting.
	The Contractor must take minutes and distribute to attendees within three (3) business days after the meeting.
Project Reporting	
PM-12	The Contractor must provide a written weekly Project Status Report (D4) delivered to MDHS by the date and time mutually agreed upon by the Contractor and MDHS during project initiation. Weekly project status reports must include, but not be limited to, the following: • Overall completion status of the project in terms of the MDHS-accepted Project Work Plan and Schedule (D2) • Accomplishments completed during the reporting period • Activities in progress (and percentage) complete, and planned • Issues encountered and proposed/actual resolutions • Planned activities for the upcoming reporting period • Updated Project Work Plan and Schedule (D2) showing percentage completed for each task • Critical path schedule slippage and strategy for resolution • Decisions and action items that the Contractor is waiting on to complete required activities

Req. ID	Requirement Description
	• Risks and proposed mitigation strategies • QA status • Change management status • Contractor staff assignment and availability changes • MDHS' resources required for activities in the upcoming reporting period

PM-13	The Contractor must facilitate project status meetings with the MDHS project team. The Contractor and MDHS will hold the status meetings in conjunction with the delivery of written status reports. Attendance might be in person or via teleconference as agreed upon with MDHS. Project status meetings must follow an agenda mutually developed by the Contractor and MDHS. The agenda might include review and discussion of:
	
	• Previous meeting minutes (including approval)
	
	• Project status, including:
	    o Accomplishments
	    o Off-schedule activities and plans for resolving off-schedule activities
	    o Upcoming activities and resource requirements
	
	• Action items closed since the last reporting period, including resolutions
	
	• New, in progress, and past due action items
	
	• Project risks and issues logs, including status of outstanding issues and their resolution
	
	• QA status
	
	• Change management status
	
	• Next meeting date
	
	• Other issues or topics that either the Contractor, IV&V Contractor, or MDHS wish to add to the agenda

PM-14	The Contractor must take minutes and distribute to meeting participants via email within three (3) business days after the meeting.
Change Control	
PM-15	The Contractor must use the change control process managed by the MDHS PMO and described in the Change Control Plan (a subsidiary of the Project Management Plan), to address requested changes in project scope, schedule, or budget.

Req. ID	Requirement Description
PM-16	The Contractor must initiate change requests for review by the MDHS PMO (which reviews and decides on the change requests) in compliance with the Change Control Plan.
PM-17	The change control process must provide a clearance process for resolving inconsistencies or incorporating refinements and scope changes, and must document accepted changes.
Deliverable Management	
PM-18	The Contractor must develop deliverables in the SOW in accordance with SLA02: Project Deliverables, and the following requirements: • Review the federal guidance documents (e.g., FNS Handbook 901, SIRT, OCSE A Guide for States 2017, etc.) and ensure that all deliverables adhere to federal requirements, leveraging templates as appropriate (e.g., for the Security Plan [D12] and Test Plan [D19]) • Provide and obtain MDHS approval on a Deliverable Expectations Document (DED) describing the proposed deliverable format and content (at a minimum) prior to beginning work • Submit deliverables in the format and with the content as outlined in the appropriate DED and within the time frame agreed upon in advance with MDHS • Conduct walkthroughs of deliverables with MDHS when requested • Proof and perform quality review of all deliverables prior to submission to MDHS for review—deliverables that do not meet this expectation may be rejected and returned to the Contractor for correction • Submit deliverables in the agreed-upon electronic format (e.g., MS Word, Project, Excel) to the MDHS project manager, as appropriate • Accept notice of acceptance or rejection of the deliverable from MDHS • Correct identified deliverable deficiencies or nonconformities • Resubmit deliverables to MDHS for acceptance within the agreed-upon number of business days for the deliverable

16.3. OCM Requirements

OCM requirements represent responsibilities to be performed by the Contractor. Detailed requirements for fulfilling OCM responsibilities are included in Table 9.

Table 9: OCM Requirements

Req. ID	Requirement Description
OCM-01	The Contractor must provide identified key personnel to provide OCM for the project.
OMC-02	The Contractor must develop, maintain, and execute an OCM methodology that complies with industry standards and best practices, such as those from Prosci®.
OCM-03	The Contractor must develop a detailed OCM Plan (D5). The OCM Plan must align with MDHS' OCM plan and other Contractor project deliverables (e.g., the Communications Management Plan in the Project Management Plan and the Training Plan), and include, at a minimum, the following subsidiary sections and plans: • OCM Methodology • OCM Roles and Responsibilities • Organizational Change Readiness Assessment Plan • Communications Plan • Coaching Plan • Resistance Management Plan • Change Champion Plan • Success Measures • Supporting Tools
OCM-04	The Contractor must implement the approved OCM methodology and the OCM Plan subsidiary plans, in collaboration with the MDHS OCM team, including performing periodic readiness assessments using tools such as web surveys, as appropriate.
OCM-05	The Contractor must monitor the success of OCM efforts and update the OCM Plan as necessary over the course of the project to reflect changes needed to help ensure stakeholder buy-in and readiness for implementation and ongoing use of the MDHS System.

16.4.   Supporting Tools Requirements

The Contractor must support MDHS in configuring and maintaining Jira and Jama for all design, development, testing, and O&M activities.

The Contractor must provide and support the necessary development tools to allow for successful development of MDHS System enhancements and defect fixes. The Contractor must provide industry-standard tools to support the delivery of services. These include, but are not limited to:

- Source Code Management (SCM) tool to store and manage multiple versions of computer programs and files. Together, the Application Lifecycle Management (ALM) ALM and SCM must contain the source code and technical documentation. The Contractor must document the approach, processes, and roles and responsibilities related to use of SCM tool in the Software Development Guide (D6). An SCM in a format acceptable to MDHS must be provided for source code.

- Database Management System (DBMS) to manage the MDHS System databases. The Contractor must leverage the DBMS for data retrieval, management, modification, and creation. Use of the DBMS must be documented in the Configuration Management Plan (D14).

- Automated testing tools to execute test cases automatically and produce test results without any human intervention. Automated test tools must help ensure previously working functionality is not affected by a new build or change. The Contractor must document the approach, processes, and roles and responsibilities related to use of automated testing tools in the Test Plan (D19).

- Configuration management tools to accurately manage configurations, configuration dependencies, and configuration changes, and automate deployments during the design, development, and testing phases of the project. The configuration management tool must control changes made to hardware, software, firmware, and documentation throughout the system life cycle.

17. DDI Services

DDI consists of nine (9) primary tasks to deliver the MDHS System based on the information provided in subsection A. System Requirements and the defined requirements in Attachment B – MDHS System RTM.

The Contractor must perform each DDI task for each implementation phase. The Contractor may reuse, update, and refine deliverables (e.g., the Software Development Guide [D6]) based on lessons learned from prior phases, specific requirements for the current phase, and evolving project needs.

17.1. System Requirements

Desired MDHS System Overview

Figure 5 represents the high-level business architecture for the desired MDHS System.

Figure 5: Business Architecture
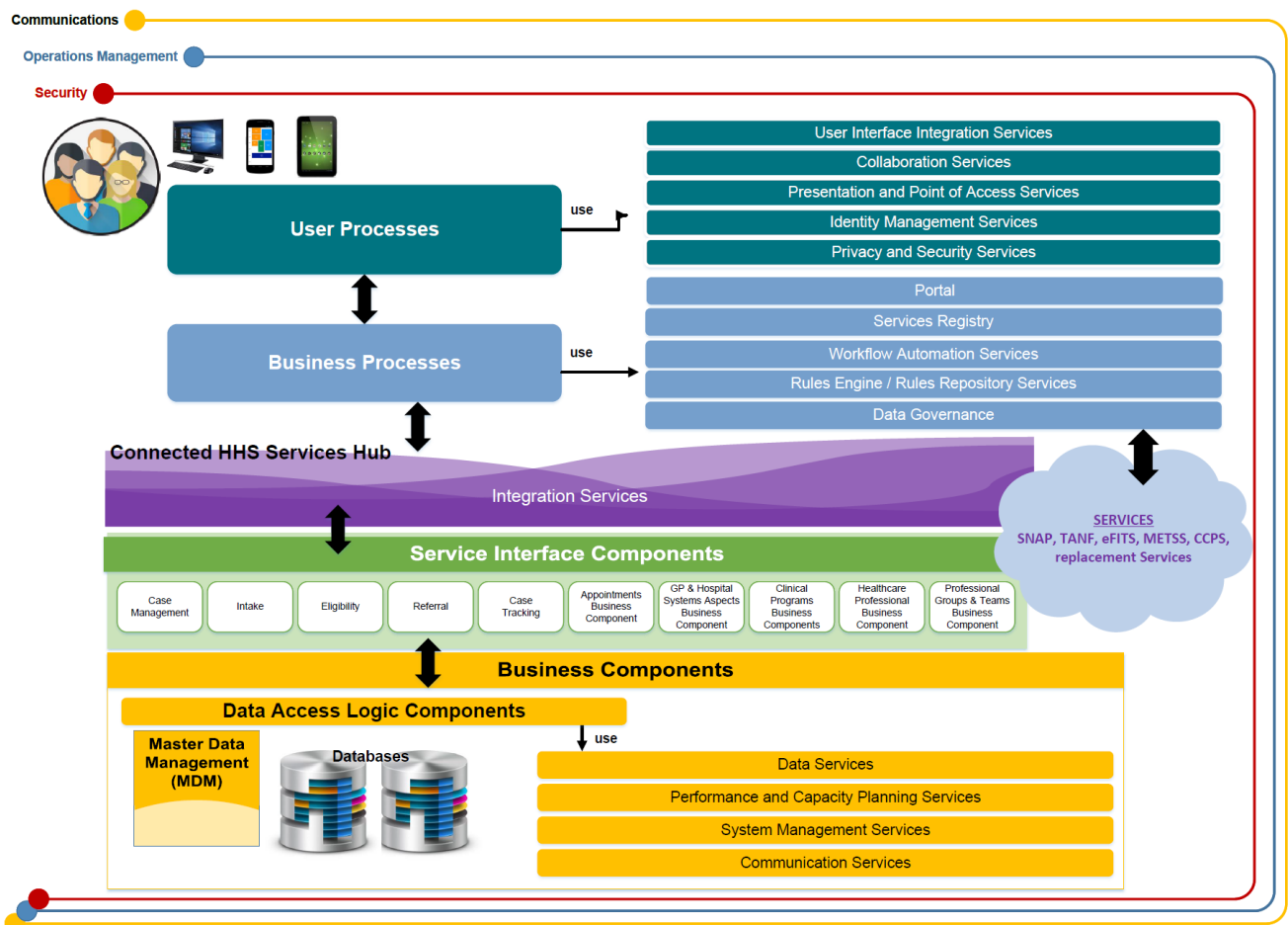
Figure 6 presents a high-level, conceptual system design for the desired MDHS System. Please see the Conceptual System Design document in the Procurement Library for more information.

Figure 6: Conceptual System Design Diagram
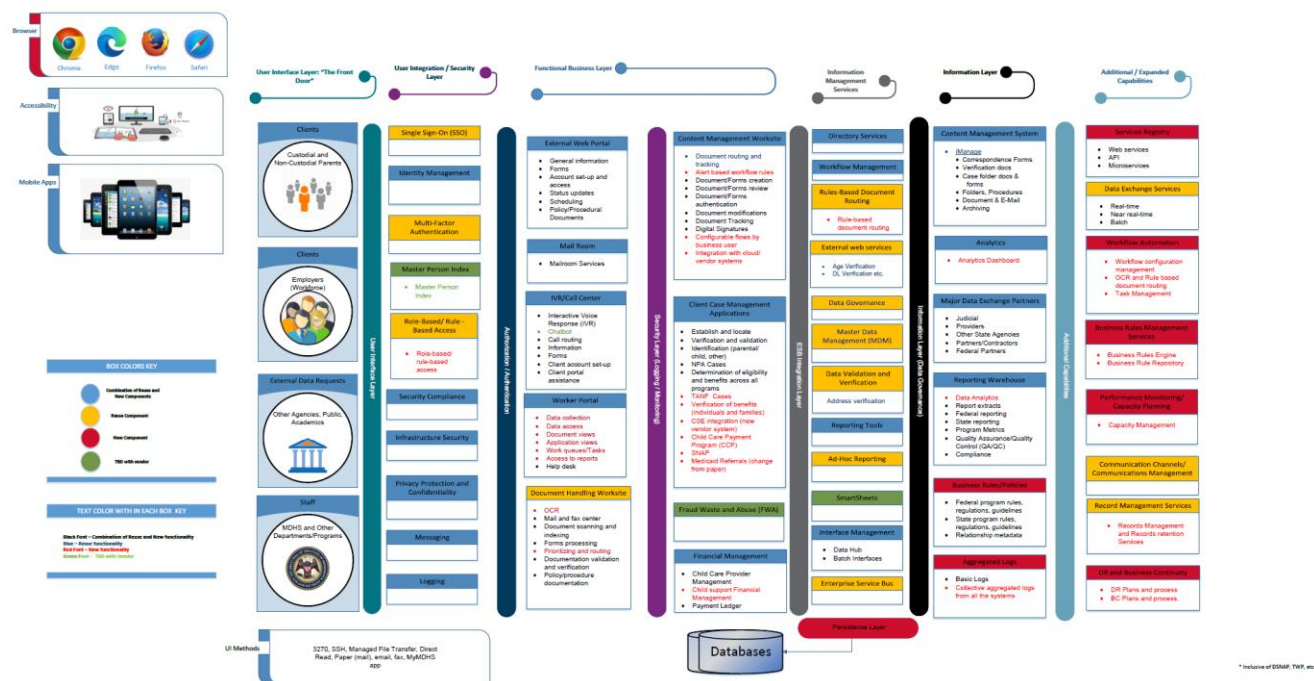
17.2.   Federal Compliance and Certification Requirements

Compliance with federal requirements is essential to the success of the project. MDHS is actively engaged with federal partners (e.g., FNS, OCSE) to ensure that it remains in compliance with all federal rules and regulations. MDHS is also committed to ensuring that the MDHS System is capable of meeting certification and other regulatory requirements set forth by the federal government.

The Contractor must comply with, and maintain, all standards and requirements of the latest version of the FNS Handbook 901, the SNAP System Integrity Review Tool (SIRT), OCSE A Guide for States 2017, and other federal requirements for all DDI and O&M tasks, activities, and deliverables. The Contractor must provide a Federal Certification and Review Management Plan (O11) and proof of MDHS System compliance, including Federal Certification and Review Supporting Documentation (O12). The Contractor must also ensure that the proposed and implemented MDHS System meets FNS, OCSE, and other federal partner

certification requirements required to ensure enhanced Federal Financial Participation (FFP) where enhanced funding is available, and normal FFP where enhanced match rates are unavailable. The Contractor must warrant that certification will be available and retroactive to the first day of MDHS System operations to ensure full FFP.

17.3. Functional Requirements

Attachment B – MDHS System RTM enumerates the detailed functional requirements for the MDHS System. The requirements in the RTM are mapped to applicable program areas (e.g., SNAP, TANF, CCPP, etc.) to assist with activities such as cost allocation and system design and implementation.

The functional requirements are grouped into business areas to help with organization; however, some functional requirements might be applicable to multiple business areas. Table 10 provides a description for each of the 12 business areas within the RTM.

Table 10: RTM Business Areas

Business Area	Description
General	This business area addresses general capabilities needed across human services programs (e.g., alerts, store and retrieve documents, etc.)
Client Management	This business area addresses managing client information and managing communications and outreach with clients.
Eligibility and Enrollment (Client)	This business area addresses determining client eligibility and enrolling and disenrolling clients in programs and services.
Service Management	This business area addresses identifying client needs, providing appropriate services, and monitoring and managing client status/outcomes.
Eligibility and Enrollment (Provider)	This business area addresses eligibility determination and enrollment for human services providers (e.g., Child Care).
Provider Management	This business area addresses maintaining information on providers, (especially their performance and certification), and communicating with the provider community.

Business Area	Description
Financial Management	This business area addresses payments and receivables and "owns" all information associated with service payment and receivables.
Performance Management	This business area addresses compliance management, performance evaluation, reporting.
Business Relationship Management	This business area addresses the standards for interoperability between agencies and partners.
Operations Management	This business area addresses managing case workloads and related support.
Legal Management	This business area addresses legal processes related to establishment, modification, and removal of court orders, including generation of legal documents. It also contains other supporting legal processes that address program-related requirements, such as paternity establishment and acknowledgment.
Enforcement Management	This business area addresses processes related to enforce payment of child support obligations, including income withholding, unemployment compensation, financial asset seizure, and license suspension. It also contains processes to enforce health insurance coverage for children.

17.4. Technical Requirements

Attachment B – MDHS System RTM enumerates the detailed technical requirements for the MDHS System. The requirements in the RTM are mapped to applicable program areas (e.g., SNAP, TANF, CCPP, etc.) to assist with activities such as cost allocation and system design and implementation. Table 11 provides a description for each of the categories for the technical requirements.

Table 11: RTM Categories

Categories	
Architecture	General

Categories	
Audit	Interfaces
Client and Provider Portal	Performance
Configuration	Reporting and Analytics
Conversion and Migration	Security
Data Governance	Validation Checks
Document Management	Workflow Management

17.5. Task 1: Requirements Analysis and System Design

17.5.1. Overview

Task 1 consists of reviewing, validating, and refining the initial system requirements (e.g., functional and technical) and finalizing the baseline system specifications in accordance with both MDHS' business requirements as well as with federal program requirements and regulations. The Contractor must combine all refined requirements identified during Task 1 into the baseline design. Additionally, the Contractor must use detailed requirements as the blueprint for all configuration, customization, development, testing, and implementation activities.

17.5.2. Objective

The objective of Task 1 is to identify the functional and technical requirements that are supported out of the box, requirements that may be enabled by configurational changes, and requirements that need customization or new module development. As part of Task 1, the Contractor is expected to elaborate system requirements, including documentation of the proposed system's architecture and modular design, as well as integration documents that describe the functional and technical requirements the Contractor must use to configure, customize, and develop the system and identify the gaps. Artifacts created through this task will form the baseline for the solution design. The Contractor and MDHS will use the formal change control process outlined in the Contractor's Project Management Plan (D1) for subsequent changes to the MDHS-accepted baseline requirements.

17.5.3. Contractor's Responsibilities

Detailed requirements for fulfilling Task 1: Requirements Analysis and System Design are included in Table 12.

Table 12: Detailed Requirements for Task 1: Requirements Analysis and System Design

Req. ID	Requirement Description
RSD-01	The Contractor must understand, and address information and analyses presented in other project artifacts (such as the RTM), MDHS processes, business requirements, data requirements, and integration points in the MDHS System.
RSD-02	The Contractor must develop a Software Development Guide (D6) that describes how the Contractor will plan, configure, design, customize, develop, test, and deploy the MDHS System. The guide must define the protocols and methodology that the Contractor will use when configuring, designing, and developing the MDHS System. The guide must include the following content: a) Description of the Contractor's methods and process for using a systematic, documented approach for all project software development activities, addressing the following elements: i. Description of the software development and configuration methods that the Contractor must use on the project, including descriptions of manual and automated tools and procedures the Contractor must use in support of these methods ii. Description of the standards the Contractor will follow for design, development, and testing b) Documentation of the Contractor's processes for: i. Requirements collaboration ii. Functional design iii. Technical design iv. Development and unit testing v. Code review/technical review vi. Testing vii. Documentation (internal and external) viii. Development of training materials ix. Implementation and configuration management

Req. ID	Requirement Description
	x. Identification of gaps c) Documentation of the Contractor's QA activities to ensure adherence to requirements from the MDHS System RTM (D7) and System Architecture Document (D8), including: i. Program specifications ii. File/database layouts and database names iii. Program logic descriptions iv. Use cases v. State diagrams vi. Sequence diagrams vii. User interface and report layouts viii. Application change specifications, in instances where the Contractor will modify the MDHS System to meet requirements articulated in the MDHS System RTM (D7) ix. Changes in navigation, in instances where the MDHS System achieves the desired results of the MDHS System RTM (D7) but in a manner that differs from the RTM description x. Data validation and edit check rules and requirements d) Description of the Contractor's SCM tool, including: i. Summary of how source code integrity is effectively managed using chosen SCM ii. Summary of SCM workflows iii. Roles and responsibilities of Contractor staff member using SCM (An SCM in a format acceptable to the MDHS will be provided for source code included under any Software Escrow Agreement, if applicable.) e) Description of the functional and technical design standards, including but not limited to: i. Schema standards ii. Coding conventions and standards; and iii. Naming conventions

Req. ID	Requirement Description
	f) Identification and documentation of the Contractor's team members responsible for QA and feedback on design documents for consistency and completeness
	g) Description of the unit test processes

	h) Documentation of the existing standards the Contractor will employ. The Contractor must fully describe how the standards will be developed, by whom, and in what time frame. The Contractor must describe the standards the Contractor will apply in the following areas:
	
	   i. Coding conventions and standards
	
	   ii. Internal documentation conventions and standards
	
	   iii. Object and module naming conventions and standards
	
	   iv. Database naming conventions and standards.

	i) Roles and responsibilities for data modeling and database management, including protocols for:
	
	   i. Requesting database structure changes
	
	   ii. Analyzing database changes
	
	   iii. Implementing and communicating database changes
	
	   iv. Managing data assets, "seed data," and test fixtures

	j) Identify how the Contractor will develop functional specifications
	k) A template for technical specifications and along with a description of how the templates will be stored, and version-controlled in the technical documentation repository
	l) A general narrative of the entire system and the flow of data through the system
RSD-03	The Contractor must develop a requirements refinement strategy in the Requirements Management Plan (a subsidiary of the Project Management Plan [D1]), documenting how the Contractor will identify new MDHS System requirements, review existing requirements, document and validate requirements, analyze and refine the requirements, and adhere to industry standards for requirements management, including as documented in the sixth edition of *PMBOK® Guide* and American National Standards Institute (ANSI)/PMI® 99-001-2013). The Requirements Management Plan must include the following content:

Req. ID	Requirement Description
	a) Methodology for the review and analysis of existing requirements
	b) Methodology for identifying and incorporating new requirements into design deliverables and system development tasks
	c) Methodology for refining requirements
	d) Plan for creating and updating a verified set of detailed requirements
	e) Strategy and methods for maintaining traceability in all system documentation across project tasks
RSD-04	The Contractor must develop the detailed MDHS System RTM (D7) to include all functional, technical, and interface requirements that the MDHS System must meet. The MDHS System RTM (D7) must show, to a relevant level of detail, the basis for each functional and technical feature of the MDHS System. This deliverable must capture the detailed functional and technical requirements for the MDHS System that are correct, complete, clear, consistent, verifiable, modifiable, and traceable.
RSD-05	The Contractor must maintain the MDHS System RTM (D7) throughout the life of the Contract to ensure all entries conform to detailed requirements and maintain a clear correlation of the progress toward the established project goals and objectives. The Contractor will refine, expand, and complete requirements through Joint Application Design (JAD) and Joint Technical Design (JTD) sessions and other forms of information collection identified in the Contract. As an outcome of design sessions, the MDHS System might have changes dictated by the business needs and mandated by federal or state regulation. The Contractor must track any changes to the MDHS System and integrate these changes into the MDHS System RTM (D7), as required by MDHS.
RSD-06	The Contractor must use an MDHS-approved requirements management tool as part of the ALM toolset, with access provided to the Contractor. The requirements management tool must: a) Document each of the detailed requirements, any changes that adjust or expand each detailed requirement, and the MDHS System component(s) required to implement each detailed requirement b) Track and provide status for each requirement from definition through acceptance; Any requirement that is not accepted must either be tracked as an issue, deferred, or cancelled

Req. ID	Requirement Description
	c) Track test cases and test results, linked to specific requirements
	d) Track known defects, along with defect status, linked to specific requirements
RSD-07	The Contractor must:
	a. Document the functional and non-functional requirements for the MDHS System applications and the software component designs using Interaction, Unified Modeling Language (UML), Rational Unified Process (RUP), or similar documentation tools and processes
	b. Follow NIST standards and industry best practices for application development and integration efforts, including patterns and practices, interoperability, portability, modularity, software security, data protection, and privacy
	c. Ensure adherence to standards across development teams
RSD-08	The Contractor must employ MDHS approved configuration management software during the design, development, configuration, and testing phases of the project in order to accurately manage configurations, configuration dependencies, and configuration changes, and to automate deployments.
RSD-09	The Contractor must coordinate and facilitate design review sessions as part of developing task deliverables and report results. Review sessions must include recommended action items to the MDHS project manager and other appropriate project participants and contractors, as identified by MDHS. MDHS anticipates that the Contractor will conduct JAD sessions to document functional aspects of the design, and JTD sessions to document technical aspects of the design. The Contractor's design session responsibilities include:
	a) Develop a meeting schedule and locations for design sessions in collaboration with the MDHS project manager and other MDHS-identified project staff members
	b) Provide training and coaching to MDHS and other project participants on the purpose, process, and expected results of the sessions
	c) Document the design process, including:
	i. Capturing all designs decisions in the relevant design documents
	ii. Documenting issues in the project's issue log, action items in the action item log, and decisions in the decision log

Req. ID	Requirement Description
	iii. Grouping design presentations in a logical manner for clarity of presentation

RSD-10	The Contractor must develop a System Architecture Document (D8) that describes the technical approach to developing the system, including a high-level architectural approach and the anticipated technologies, hardware, operating software, programming aids, application programs, third-party products, and integration points. Elements of the technical approach might be modified prior to completion of the Technical System Design Document (D10). The document must include the following content:
	
	a) Description of the hardware and software components, including programming platforms and tools, which the Contractor must use for developing, configuring, testing, implementing, enhancing, operating, and maintaining the MDHS System, and its interfaces to services partners and other organizations with which MDHS has cooperative agreements
	
	b) The System Architecture Document (D8) must describe how the MDHS System will integrate with MDHS' existing infrastructure
	
	c) Identification of the key technical requirements and constraints on the MDHS System
	
	d) Development of a system capacity plan including:
	    i. Estimate of the MDHS System load, and necessary performance requirements for operational memory, computing power, and data storage
	    ii. Estimates for planned growth
	
	e) Development of an ease-of-use management plan addressing how the Contractor will develop the MDHS System to ensure a satisfying and productive user experience, including the interface standards to be applied. The plan must specify the ease-of-use principles that the Contractor will use to develop the system and the protocols to ensure the Contractor will apply these principles consistently

RSD-11	The Contractor must develop and maintain a Functional System Design Document (D9) to summarize how the Contractor will configure, customize, and develop the MDHS System in accordance with MDHS' requirements. The document must: a) Document the design process, including the following content:

Req. ID	Requirement Description
	i. Summary of each design session; the summary must be responsive to MDHS' comments and revisions provided during design activities
	ii. Functional design issues and decisions
	iii. Materials from design sessions, presented in a logical manner for clarity
	b) Incorporate updates to the design deliverables made during design sessions to accurately document detailed requirements so that the accuracy of the design is maintained
	c) Incorporate and address information and analysis presented in project artifacts (such as the MDHS System RTM [D7])
	d) Establish traceability to the MDHS System RTM (D7) requirements by cross-referencing each functional design element or RTM category to the MDHS System RTM (D7)
	e) Describe, from a user's perspective, the standard use of MDHS System functions and the interaction between staff and the MDHS System, including:
	i. The goals and objectives of each function
	ii. Addition of the MDHS-provided citations to the relevant policy and statutory constraints, where applicable
	iii. Business process workflows for common system functions
	iv. Wireframes of proposed user interface layout
	v. Templates for all forms, letters, notices, reports, and input and/or output files
	vi. A list of all user system alerts and messages
RSD-12	The Contractor must describe their process for identifying and resolving gaps between the MDHS System requirements and MDHS requirements in order to meet MDHS' business and technical requirements.
RSD-13	The Contractor must develop a Technical System Design Document (D10) that summarizes how the Contractor will configure, customize, and develop the MDHS System in accordance with MDHS' requirements. The document must: a) Document the technical design process, including: i. Capture all design decisions in the technical design documents

Req. ID	Requirement Description
	ii. Technical design issues, action items, and decisions
	iii. Materials from design sessions, presented in a logical manner for clarity
	b) Provide a database design overview, including an initial Entity Relationship Diagram (ERD) of the database tables together with the descriptions of all MDHS System tables and columns
	c) Describe the security architecture, including how the MDHS System will implement role-based security, ensure both at-rest and in-transit data security, and if and how the MDHS System will segregate and protect more sensitive data (e.g., Personal Identifiable Information [PII], Protected Health Information [PHI], Federal Tax Information [FTI])
	d) Incorporate and address information and analysis presented in project artifacts (such as the MDHS System RTM [D7])
	e) Establish traceability to the MDHS System RTM (D7) requirements for each technical design element to the required business process that it implements
	f) Document MDHS System minimum requirements, including:
	i. Hardware requirements
	ii. Operating system requirements
	iii. Browser requirements
	g) Summarize all interfaces and data exchange methodology used for each interface
RSD-14	The Contractor must develop a Database Development Plan (D11). The plan must:
	a) Establish the standards and methodology for database development, deployment, operations, and maintenance
	b) Specify the methodology and rules for determining and documenting entity relationships
	c) Describe the procedures for developers to use to identify new database tables and new or revised columns on existing database tables
	d) Employ an ERD that depicts a conceptual data model, the logical data model, and the physical data model for the MDHS System. The Contractor must update the model throughout the project.

Req. ID	Requirement Description

RSD-15	The Contractor must develop a Security Plan (D12). The plan must align with FNS 901 Handbook requirements, including Section A14, and must summarize how the Contractor will develop and configure the MDHS System in accordance with federal and state requirements for information security. Separate plans must be created to support each federal oversight agency, including:
	
	a) IRS, using RS Pub 1075 standards
	
	b) SSA, including Federal Information Security Management Act (FISMA) standards(https://www.ssa.gov/dataexchange/security.html)
	
	The plan must:
	
	a) Document details of the managerial, technical, privacy, and operational controls, documenting the current level of security implemented within the MDHS System and how the Contractor will meet the security controls and requirements specified by federal and State information security policies and standards
	    i. FNS Security Plan Checklist
	    ii. NIST guidance, including:
	        1. Computer security: https://csrc.nist.gov/publications/sp
	        2. Cybersecurity: https://csrc.nist.gov/publications/sp1800
	        3. IT: https://csrc.nist.gov/publications/sp500
	        4. FIPS: https://csrc.nist.gov/publications/fips.
	
	b) Describe the Contractor's security policies and provide copies of the Contractor's security policies
	
	c) Describe the Contractor's information security organization, including:
	    i. Organizational chart
	    ii. Named chief security engineer who will be designated as key personnel
	    iii. Allocation of information security responsibility
	    iv. Use of confidentiality agreements (if any)
	    v. List of information security organizations the Contractor belongs
	    vi. How the information security organization is independently reviewed or audited

Req. ID	Requirement Description
	d) Describe how assets are managed, including how the Contractor determines and classifies different levels of information
	e) Describe human resources security, including screening of potential employees, information security training provided to employees, and how employees are briefed in terms of continued security awareness
	f) Describe physical and environmental security including security controls at the data site, other Contractor facilities, and all off-site equipment, including any backup sites
	g) Describe the Contractor's policies on documentation of operating procedures, change management, segregation of duties, third-party service providers, protection against malicious code, backup, network security, media handling, and event/log monitoring, and how each part will be used with the project
	h) Describe the Contractor's access control policies, including policies for operating system access, computer room access, network access, its password management system(s), and its mobile computing policies, and how each part will be used with the project
	i) Describe how the Contractor validates data, uses cryptography, protects source code, inspects source code for potential security defects, and manages outsourced software development (if any), and how this will be applied and used with the project
	j) Describe how the Contractor manages and investigates information security incidents and how it uses information from security incidents to modify or improve its security practices
	k) Describe the Contractor's use (if any) of MDHS-authorized independent compliance auditors and how those auditors will be used within the project
	l) Describe the Contractor's use of authorized independent third-party vulnerability and penetration testing and how vulnerability and penetration testing will be used within the project
	m) Describe the Contractor's security development life cycle plan for the project
	n) Describe the Contractor's system security planning, including how the Contractor plans security enhancements and upgrades, how it monitors

Req. ID	Requirement Description
	current threats and plans to meet them, and how security planning fits in with its overall IT planning process for the project
	o) Describe the system security tools used within the project
	p) Describe the processes and procedures used to define and maintain MDHS System security
	q) Describe and list of all external system security dependencies (e.g., firewalls, Network Access Control [NAC]) required as part of the MDHS System
	r) Describe the security infrastructure established (e.g., type and level of hardware, network, database, and software security) and overall features of the security system to satisfy federal and MDHS requirements
	s) Detail how the Contractor will review the MDHS System code throughout the project for security vulnerabilities, coding errors, and updates; this must include documentation for tracking, remediation, and testing
	t) Prepare separate initial Information System Risk Assessment (ISRA), Privacy Impact Assessment (PIA) and System Security Plan (SSP) in advance of the deployment to support each federal oversight agency, which includes establishing and maintaining a Plan of Action & Milestones (POA&M) registry for each federal agency controlling data used by the MDHS solution
RSD-16	The Contractor must develop and submit a Business Continuity and Disaster Recovery Plan (D13) prior to federal certification. The plan must: a) Align with requirements outlined in the FNS 901 Handbook, SIRT, including Section 9.3.4.2, and be consistent with the requirements in the initial MDHS System RTM b) Describe the Contractor's plan to protect the MDHS System and maintain critical business processes in the event of natural disasters, hardware and software failures, human error, or other contingencies that could interrupt services c) Address recovery of business functions, human resources, and technology infrastructure associated with the MDHS System d) Include the following content:

Req. ID	Requirement Description
	i. Threat considerations (including natural, technical, and human) with impact assessments, including:
	1. Strategies and related procedures for recovery of facilities, hardware, software, data, customer services, and key persons responsible for the strategies and related procedures
	2. MDHS System and MDHS System data backup, retention, and restoration processes
	3. Testing procedures for the Business Continuity and Disaster Recovery Plan (D13)
	e) Protocols to provide immediate response to and subsequent recovery from any major unplanned business disruption, such as loss of utility service, building evacuation, or a crisis event such as a major fire, flooding, earthquake, etc.
	f) Hardware, software, data, and communications components needed to provide for alternative site operations for production and development
	g) Process for duplicating the MDHS System at the alternative site, specifying the retention period for all application and operating MDHS System components
	h) Documentation of Recovery Point Objectives (RPOs) and Recovery Time Objectives (RTOs)
	i) Steps required for troubleshooting, replacing, reconfiguring, and restoring the MDHS System hardware, software, and infrastructure
	j) Processes utilized to verify the health and accuracy of MDHS System backups
	k) Conditions under which MDHS will use the alternative site
	l) Procedures for testing the alternative site
	m) Alignment with disaster recovery provisions set forth in SLAs
RSD-17	The Contractor must describe how the MDHS System meets the following federal architecture and interoperability requirements: a) Industry-based, open-architectural standards b) Modular, loosely-coupled components c) Relational or object-oriented database

Req. ID	Requirement Description
	d) Web and real-time processing
	e) Rules Engine management
	f) Data privacy, security, and integrity, with access limited by staff role
	g) Interoperable systems that support e-communication and processing between systems
	h) Flexibility to host modular components in the MDHS-approved cloud
RSD-18	The Contractor must notify MDHS in writing, upon completion of Task 1 and after deliverables have been updated in accordance with the section above, that the MDHS System requirements analysis and system design materially conform to MDHS requirements and deliverables.

17.6. Task 2: System Development and Configuration

17.6.1. Overview

Task 2 involves activities to develop and configure the solution, including integrating, enhancing, and modifying the MDHS System.

17.6.2. Objective

The objective of Task 2 is to successfully establish the MDHS System to meet MDHS' requirements by using the approved project approach and methodology as well as Task 1: Requirements Analysis and System Design.

17.6.3. Contractor's Responsibilities

Detailed requirements for fulfilling Task 2: System Development and Configuration are included in Table 13.

Table 13: Detailed Requirements for Task 2: System Development and Configuration

Req. ID	Requirement Description
SDC-01	The Contractor must develop and maintain MDHS System code and components as to allow the ability to integrate with both off-the-shelf solutions enterprise software and industry standards opensource frameworks and systems to the maximum extent possible. This will allow a flexible integration capability, including

Req. ID	Requirement Description
	Content Management, User Analytics, Chatbot, Notifications, Rules Engine, Workflow, Document Management, Identity and Access Management, etc.

SDC-02	The Contractor must develop a Configuration Management Plan (D14) that describes the Contractor's established configuration management methodology, including approach, tools (ALM and SCM systems), hardware and software environments, methods, processes, standards, evaluation criteria, and terminology. The plan must address all components of the MDHS System and align with FNS 901 Handbook requirements. The plan must include the following content:
	
	a) Description of configuration management processes and procedures, including the following elements:
	
	    i. Identification and definition of baseline configuration items
	
	    ii. Process for controlling modifications and releases of configuration items
	
	    iii. Process for reporting and recording the status of configuration items and requested modifications
	
	    iv. Process for ensuring completeness, consistency, correctness, and integrity of configuration items
	
	    v. Process for controlling storage, handling, and delivery of configuration items
	
	b) The roles and responsibilities of Contractor personnel responsible for configuration management
	
	c) Summary of storage and retention policies for configuration items
	
	d) Summary of configuration management tools to be used as part of the project
	
	e) Description of the configuration, customization, and software development activities the Contractor must perform and the environments in which the Contractor must complete this work
	
	f) Detailed description of the development and configuration environment the Contractor will use to support development through O&M of the MDHS System. The environment must:

Req. ID	Requirement Description
	i. Consist of one or more integrated environments used for the duration of the project, including development, configuration, implementation, enhancements, and subsequent O&M
	ii. Allow development, configuration, and O&M of the MDHS System without disruption of any other program computing activities; the environment must also support managing code development and testing
	iii. Support a Continuous Integration Environment (CIE) using gated check-ins and other processes to ensure inadequate code is not introduced into the build process
	iv. Link software code to the MDHS System RTM (D7) and unit testing results
	v. Identify necessary hardware, infrastructure and software tools, interfaces, workstation configurations, servers, and network specifications to provide the required environment
SDC-03	As part of Configuration Management Plan (D14), the Contractor must describe the Contractor's established database configuration management methodology. The plan must describe software the Contractor needs to develop, or tools the Contractor needs to acquire, to automate the database configuration management process. This task must also include Database Management Software (DBMS) for database creation and management. The plan must include the following content: a) Control and update processes used to manage all database objects across the development, testing, training, and production environments b) Procedures developers will use to establish lookup tables c) Description of how the Contractor must manage database management scripts, with a description of the procedures developers must use to identify new database objects in the MDHS System, including the documentation of the object's purpose and the utilized object-naming conventions d) Description of how an audit trail is utilized to maintain a full history, including creation, modification, and deletion of database objects for each environment e) Updated data dictionary, including:

Req. ID	Requirement Description
	i. Description of all tables used in the MDHS System ii. ERD depicting the relationships among tables and how to navigate to specific records and fields from higher-level structures grouped by functional areas (e.g., financials, accounting, case management, client profile); the Contractor must perform periodic reviews of these tables to ensure documentation is current iii. Description of each data element within each table (e.g., name, data type, constraints, narrative description) iv. Table of values for each data element for enumerated values v. Stored procedures and triggers vi. Views vii. Functions viii. Descriptions of naming conventions used to create data element names
SDC-04	The Contractor must implement separate development and test environments. The Contractor must provide documentation for each environment. The Contractor must support the timely acquisition, installation, and configuration of the hardware, software, and infrastructure required to develop and host the MDHS System.
	The Contractor must employ MDHS-approved configuration management software during the design, development, and testing phases of the project in order to accurately manage configurations, configuration dependencies, and configuration changes, and to automate deployments.

SDC-05	The Contractor must develop, configure, and manage source code in accordance with functional, technical, and other requirements (e.g., security) articulated in the Configuration Management Plan (D14), including:
	
	a) Developing and configuring the MDHS System to meet requirements, in accordance with the current MDHS-accepted deliverables and other associated design and development tasks, including:
	
	    i. Configuration and modification of the software components to meet requirements
	
	    ii. Configuration, modification, or building of State-specific integration components

Req. ID	Requirement Description
	iii. Coding of all new or modified program modules to meet requirements
	iv. Preparing the MDHS System components for integration
	v. Integrating the code and functionality of the transfer system, third-party components, and custom code to deliver a fully functioning system
	vi. Facilitating additional design review sessions with MDHS-designated staff and other project participants
	vii. Updating deliverables to reflect refinements or additional requirements identified during development and configuration, in accordance with the project's change control process
	viii. Providing MDHS access to source code written by the Contractor within two (2) weeks of a written request
SDC-06	The Contractor must schedule incremental demonstrations of the MDHS System-tested code with MDHS project staff and stakeholders identified by MDHS prior to beginning user acceptance testing (UAT) of the new functionality. The purpose of the demonstrations is to showcase the development and configuration progress, solicit feedback, and validate the accuracy of functionality in accordance with MDHS' requirements.
SDC-07	The Contractor must develop and deliver a monthly Defect Remediation Report (D15) outlining open and resolved defects throughout DDI UAT and O&M tasks. The report must include the following content: a) Number of resolved and unresolved (not fixed in UAT or production) defects for each defect category b) Contractor assigned date for each defect c) Closed date for each defect d) Number of defects that exceeded the aging performance standards for resolution within the reporting period
SDC-08	The Contractor must support MDHS-approved ALM toolset to support all DDI and O&M tasks and services. The toolset must include requirements management tools to document each of the detailed requirements with any changes that adjust or expand each detailed requirement, and the System component(s) required to

Req. ID	Requirement Description
	implement each detailed requirement. The Contractor and MDHS will use this ALM toolset to: a) Track and provide the status of each requirement from definition through acceptance b) Track test cases and test results linked to specific requirement c) Track well-formed user stories in accordance with an agreed-upon template, method, and/or format and d) Track known defects and defect statuses linked to specific requirements; the Contractor must document the approach, processes, and roles and responsibilities related to use of ALM tools in the Master Project Management Plan
SDC-09	The Contractor must ensure the MDHS System supports the ability to accommodate the current and future business and technical needs of MDHS, e.g., changes in business processes, changes in standards and transactions, and/or increased transaction volumes.
SDC-10	The Contractor must provide resources to staff DDI Agile teams.
SDC-11	The Contractor must perform activities for each phase in accordance with an Agile iterative process. The activities may include, but not limited to: a) Creating and refining epics and acceptance criteria b) Creating and refining user stories and acceptance criteria c) Creating development and testing tasks d) Creating and maintaining team and sprint backlogs e) Managing backlog refinement meetings f) Providing story sizing for backlog items and associated estimated level of effort g) Providing functional and technical subject matter expertise as required h) Performing impact assessments, adhering to compliance standards, ADA and latest WCAG standards in order to assess, maintain, and improve the software product quality during iterations
SDC-12	The Contractor must use MDHS-approved SCM tools for managing all of the source code in the MDHS System.

Req. ID	Requirement Description
SDC-13	The Contractor must conduct random code reviews with MDHS to ensure compliance with MDHS approved coding standards a minimum of once per quarter.
SDC-14	The Contractor must provide MDHS technical staff with secure access to all MDHS System code and solutions under source control.
SDC-15	The Contractor must notify MDHS in writing, upon completion of Task 2 and after deliverables have been updated in accordance with the section above, that the MDHS System materially conforms to MDHS requirements and deliverables.

17.7.   Task 3: Data Conversion and Migration

17.7.1. Overview

Task 3 involves data conversion and migration activities from legacy IT systems. The Contractor must ensure this task results in the accurate conversion and migration of data to the MDHS System. Task 3 includes, but is not limited to, planning, coding, extracting, transforming, loading, testing, and validating the data conversion and migration processes.

17.7.2. Objective

The objective of Task 3 is to ensure accurate, thorough, and complete conversion and migration of data from multiple existing systems to the MDHS System. This task must ultimately facilitate efficient and timely development and implementation of the MDHS System, while maintaining the security and integrity of the MDHS System data. This task must comply with protocols established by MDHS for electronic transfer of records, be compliant with requirements documented in the MDHS System RTM (D7) and meet all federal and State laws and regulations in regard to the protection of confidential information. It is imperative that the Contractor not comingle production and test data, or, if comingled data exists, correct it or provide recommended solutions to correct it. MDHS' objective for conversion is to be able eliminate any need for the legacy IT systems' historical data until the federal retention requirements are met. Appendix B – Program Data for Conversion contains the database size and number of records to assist with estimating the volume of data that the Contractor will need to convert.

17.7.3. Contractor's Responsibilities

Detailed requirements for fulfilling Task 3: Data Conversion and Migration are included in Table 14.

Table 14: Detailed Requirements for Task 3: Data Conversion and Migration

Req. ID	Requirement Description
DCM-01	The Contractor must develop a data conversion and migration strategy that describes the Contractor's strategy for converting and validating all existing data into the MDHS System. The strategy must reflect the Contractor's and MDHS' lessons learned from conversions of data for other projects of similar scope and size, addressing the type and amount of data to be converted and the treatment of any data that is not being converted. The strategy may differ by legacy IT system and program and must consider the impacts on each. The strategy must also include all data elements to be converted from the MDHS legacy IT systems into the MDHS System. The strategy must include the following: a) Description of the general approach to be used to extract, transform, cleanse, and load data from the source to target destinations during the conversion and migration process to the MDHS System b) Approach for data migration planning that aligns with FNS 901 Handbook, Section 5.4.1 and 6.3.4, including identifying the data the Contractor needs to migrate, how the Contractor must prepare it, associated risks, etc. c) Approach for converting records identified as need to migrate, this transition might require that both the legacy IT systems and the MDHS System run for a migration period in parallel, until MDHS is satisfied that complete migration will not negatively impact programs or customers d) Approach to convert a skeleton structure for records in a category of closed beyond one (1) year; the approach can be handled within a separate repository where the user has the ability to access records and transfer required elements of the record(s) using an automated script on a demand basis to the MDHS System e) Approach to integrating data conversion and migration go-live strategy with the planned implementation and rollout; the strategy must address all data conversion and migration requirements and must include the following content:

Req. ID	Requirement Description
	i. Go-live approach, including an explanation of whether parallel runs of the IT legacy systems and MDHS System will be necessary during the conversion process, or if a one-time cutover to the MDHS System will occur; if an incremental or parallel strategy is proposed, the Contractor must describe the approach for ensuring that the MDHS System data is continually updated with changes from the interfaced systems and the legacy IT systems, until all components of the MDHS System have been implemented
	ii. Description of whether the Contractor must implement the conversion process in phases or stages and, if so, identify which components must undergo conversion in each phase
	iii. Description of automated data conversion tools that the Contractor must use (e.g., Extract, Transform, and Load [ETL] tools)
	iv. Description of any part of the conversion process that the Contractor must perform manually
	v. Description of any custom-developed conversion programs that will be needed, and associated performance tuning
	vi. Description of staffing approach
	vii. Whether data availability and use should be limited during the conversion process
	viii. Security and privacy controls required for the conversion process
	ix. Identification, and description of the disposition of obsolete, unused, or otherwise identified data that is not converted
	x. Retention policy for the data that has been converted to facilitate rerunning the conversion process if necessary
	xi. Process for normalization of data to be converted
	xii. Approach to ensure data quality before and after all data conversions
	xiii. Plan for evaluation of databases to determine whether the data needs to be converted and migrated into the MDHS System
	f) Description of the phased data conversion that includes:
	i. Migration plan detailing the data that will be converted

Req. ID	Requirement Description
	ii. Identifying the type of records in the legacy IT systems that will be converted
	iii. The time frame and the type of data and the amount of the data (percentage of the client population) that will be converted
	iv. Applicable milestones and deliverables
	v. Process for handling the exceptions
	vi. Real-time conversion/automated conversion scripts
	vii. Process for handling non-converted historical data
	viii. Data hierarchy process
DCM-02	The Contractor must develop a Data Conversion and Migration Plan (D16), inclusive of the data conversion and migration strategy, and conduct all data conversion and migration activities in accordance with the plan. MDHS expects the Contractor to leverage conversion tools and provide sufficient data to support development, UAT, and implementation tasks. The plan must align with requirements identified in the MDHS System RTM (D7) and describe the preparation and specifications for converting data from the legacy IT systems to the MDHS System. This plan must include in detail the overall approach and processes used in the data conversion, including data conversion objectives, assumptions, and constraints. The plan must include the following content: a) Inventory and cross-reference of source and target data elements, including mandatory and required data elements, schema, metadata, and all self-describing files b) Description of the process for data extraction, transformation, and loading for each data source c) Description of the tools needed to execute the conversion and migration d) Description of data conversion objectives e) Description of any assumptions or dependencies regarding the data conversion effort f) Description of how missing data (data needed by the MDHS System but not available from existing systems) will be managed, including procedures for handling missing data, data exceptions, and default values g) Description of constraints that the Contractor and MDHS must take into consideration prior to the data conversion and migration progress

Req. ID	Requirement Description
	h) List of stakeholders and their roles and responsibilities in the conversion process
	i) Schedule of conversion activities to be accomplished; must include the required tasks in chronological order, with beginning and ending dates of each task, key personnel responsible for each task, and task dependencies and milestones; if appropriate, tables, graphics, or both may be used to present the schedule

	j) Description of the strategy for data QA and control, including:
	
	   i. Identification of any prerequisites
	
	   ii. Description of the general backup strategy
	
	   iii. Description of the data restoration process plan
	
	   iv. Identification and remediation plan for records deemed to be duplicates
	
	   v. Identification, description, and migration plan for the types of data quality problems that might occur, including but not limited to the following considerations:
	
	      1. Data type redefinitions (e.g., alphas in dates and numbers, embedded information in codes and intelligent keys, implied content)
	
	      2. Garbled content (e.g., multiple uses for a single field, freeform text values, corrupted data, un-initialized data)
	
	      3. Invalid record relationships (e.g., broken chains in set relationships, orphan records, mismatched keys)
	
	      4. Invalid content (e.g., values out of defined range, code finds not on a valid list of values or lookup table, blank fields)
	
	      5. Context changes (e.g., import of external data, historic changes to operational parameters [system upgrades], synchronization timing of duplicated, denormalized data)
	
	      6. Behavior problems (e.g., variations in actual data from planned constraints of size, data type, validation rules, and relationships)

Req. ID	Requirement Description
	k) Description of the expected conversion impact on the existing State infrastructure, if any, including mainframe and services, and how the conversion impact was determined
	l) Description of the remediation plan (including the acquisition, installation, or implementation of associated hardware and software) to address any adverse impacts the conversion might create for the existing infrastructure, and protocols for implementing the remediation plan
	m) Description of risks associated with the proposed data conversion and migration strategy that could affect conversion feasibility, technical performance of the converted system, and the conversion schedule, costs, and backup and recovery procedures
	n) Data hierarchy process
	o) Automated data conversion scripts
	p) Description of data converted
DCM-03	The Contractor must develop a Data Conversion and Migration Test Plan (D17) that includes the following content: a) Details on which data elements from the legacy IT systems the Contractor must convert and migrate to the MDHS System b) Map of the codes for each data element within the legacy IT systems to the corresponding codes for each data element within the MDHS System c) Determination of which records in the legacy IT systems should be converted and migrated to the MDHS System, and what the initial status of each should be d) Schedule for the data conversion and migration activities tied to development and configuration, testing, and implementation tasks e) Criteria for MDHS System conversion readiness f) Testing criteria to determine when data elements are deemed converted and migrated successfully for a given record, and whether all records that MDHS intended to convert and migrate were converted and migrated to the correct status g) Definition of test data structure h) Test scripts, including testing against intentional errors i) Definition of dedicated testers

Req. ID	Requirement Description
DCM-04	The Contractor must develop Data Conversion and Migration Test Results Reports (D18) to document the results of executing the data conversion and migration activities, and the testing performed to validate that data conversion and migration programs are working correctly. The report must include the following content: a) Scope of the testing the Contractor performed for data conversion and migration and interfaces, including: i. Systems and conversion software to which the report applies ii. MDHS System software overview including purpose of the systems, history, operation, and users iii. Purpose of the test iv. General information that aids in understanding the testing results, including background information and a glossary of terms and acronyms b) A narrative overview of the test results, including: i. Overall assessment of the conversion and migration software as demonstrated by test results ii. Reports of likely duplicate records and clients, error reports, and conversion efficiency reports for all conversion and migration processes performed iii. Reports of data conversion and migration verification results, including reports summarizing aggregated pre- and post-conversion numbers (e.g., totals on clients, active cases, client demographics, etc.) iv. Documented state of readiness for data conversion and migration activity before activity commenced v. Completion status of each test case associated with the test as demonstrated by test results in the MDHS-accepted format vi. Description of the test data set vii. Identification of any remaining defects, limitations, constraints, or other anomalies detected by the testing performed (problem/change reports may be used to provide defect information)

Req. ID	Requirement Description
	viii. For each remaining defect, limitation, constraint, or other anomaly, a description of its impact on conversion and migration software performance, the impact on software design to correct it, and a recommended solution for correcting it
	ix. Recommended improvements in the design, operation, or testing of the conversion and migration software tested
	c) A summary of unexpected results that includes:
	i. Test case with an explanation of the problem(s) that occurred
	ii. Test procedure step(s) in which the problem(s) occurred
	iii. Documentation of the number of times the procedure or step was repeated in attempting to correct the problem(s) and the outcome of each attempt
	iv. Documentation of each test case in which deviations from test case/test procedure occurred, the rationale for the deviation, and assessment of the impact on the validity of the testing
	d) Detailed results of conversion, migration, and interface testing, including:
	i. Chronological record of the testing covered by the report including dates, times, and locations tests were performed
	ii. Hardware and software configurations used for each test
	iii. Dates and times of each test-related activity including individuals who performed the activity
DCM-05	The Contractor must document any known defects uncovered in Task 3 in the monthly Defect Remediation Report (D15).
DCM-06	The Contractor must provide the converted data from the legacy IT system to the MDHS System with acceptable and agreed-upon quality by MDHS. In addition, the Contractor must provide a sufficient amount of converted data in environments such as development, testing (including UAT), and training.
DCM-07	The Contractor must notify MDHS, in writing, upon completion of Task 3 and after deliverables have been updated in accordance with the section above, that the MDHS System data materially conforms to MDHS requirements and deliverables.

17.8. Task 4: Testing

17.8.1. Overview

Task 4 involves several types of testing to confirm the MDHS System meets detailed requirements in the MDHS System RTM (D7), complies with MDHS System documentation (e.g., System Architecture Document [D8], Functional System Design Document [D9], and Technical System Design Document [D10]), and adheres to the Security Plan (D12). The Contractor might test individual system components as they are ready, but must test the compatibility and integration of all components within the entire MDHS System as a complete system when all components have been completed, including MDHS System interfaces and data exchanges. Testing must adhere to current FNS and OCSE testing guidelines.

17.8.2. Objective

The primary objective of Task 4 is to determine whether the MDHS System is ready for UAT. During the testing phase, formally controlled and focused testing is performed to detect errors, issues, and defects that need to be resolved.

MDHS envisions testing will occur concurrently with the development tasks, with testing for each development iteration. Testing should occur throughout the development process, and the initial planning for testing activities should occur early in the project. MDHS recommends that planning for the testing phase occur as early in the project as possible to help ensure successful testing results.

17.8.3. Contractor's Responsibilities

Detailed requirements for fulfilling Task 4: Testing are included in Table 15.

Table 15: Detailed Requirements for Task 4: Testing

Req. ID	Requirement Description
T-01	The Contractor must develop a Test Plan (D19) that describes the Contractor's processes for end-to-end testing across all implementation phases. The plan must align with requirements in FNS 901 Handbook Section 6.0 Test Planning and the OCSE A Guide for States 2017 testing guidelines. The Test Plan (D19) must include the following content: a) Summary of processes for differing test types, including: i. Unit testing

Req. ID	Requirement Description
	ii. Integration testing
	iii. System testing
	iv. Data conversion and migration testing
	v. Interface testing
	vi. Usability/Accessibility, ADA 508 testing
	vii. Performance load/stress testing, including testing to the point of system failure
	viii. Security testing (role-based, penetration, and vulnerability)
	ix. Disaster recovery testing
	x. Regression (baseline) testing
	xi. UAT, including support of UAT activities for users as defined by MDHS
	xii. Testing, including testing of system components that affect external system users, such as web portals, web-based software, and data entry by other vendors; testing is a part of the Operational Readiness Testing (ORT) period
	xiii. Implementation/ORT, including disaster recovery
	xiv. Data Conversion Testing
	xv. Usability/Accessibility
	b) Written test plans, including a "Complete and Final Test Plan", prior to the start of UAT and in alignment with FNS Handbook 901 and OCSE A Guide for States 2017 guidance
	c) Documentation of a testing approach that includes:
	i. Roles and responsibilities of all entities involved in testing
	ii. Orientation and kickoff plan
	iii. Test techniques and methods
	iv. Test standards, including compliance with FNS and OCSE test requirements
	v. Test phases
	vi. Description of the planned test environments

Req. ID	Requirement Description
	vii. Types of automated testing tools depending on type of testing (different automated testing tools may be used for load/stress, unit, system performance and regression testing)
	viii. Verification that testing tools work as designed
	ix. Configuration management of the test environment(s) and tools
	x. Test data, including use of sanitized test data
	xi. Test documentation, including test cases, test scripts, and test conditions that examine each functional objective of the MDHS System, and the expected test results to verify that each MDHS System component has achieved its functional objective
	xii. Approach to map traceability from each test case to the detailed requirement it addresses in the MDHS System RTM (D7)
	xiii. Defect and issue identification
	xiv. Resolution process
	xv. Test schedule and work plan
	xvi. Test metrics and measurements
	xvii. Test preparations
	xviii. Test execution
	xix. Test monitoring
	xx. Test status meetings and reporting
	xxi. Go/no-go decisions or checkpoint decisions
	xxii. Test pass/fail criteria
	xxiii. Test closure criteria
	xxiv. Test closure evaluation criteria and wrap-up
	xxv. Archiving, lessons learned, etc., to better promote continual process improvement
	xxvi. MDHS System testing knowledge transfer
	xxvii. Final System testing results report
T-02	The Contractor must develop multiple test environments (i.e., System Test, Conversion Test, Interfaces Test, UAT, and ORT, etc.) and associated documentation to perform MDHS System testing. The test environments must support all testing needs of the MDHS System to occur without disruption to any

Req. ID	Requirement Description
	other MDHS computing activities. The Contractor must make the test environments available to designated MDHS staff members. Test environments must include: a) Detail of all components the production environment must contain, including copies of all software, database, tables, and files loaded with sanitized test data, appropriately configured to adequately emulate the MDHS System production use b) Copies of other systems' files and/or software involved in the interfaces in order to adequately test system-to-system interfaces c) Documentation of associated test environment containing the following: i. Inventory of the hardware, software, network communication, and data storage components necessary to support the ongoing testing needs of the MDHS System ii. Procedures for creation, maintenance, and rebuilds of the test environment, and description of controls required to maintain the integrity of test data iii. List of configuration, security, and change control processes iv. Location of system passwords, license keys, and maintenance contract information v. Outbound and inbound data exchange connections vi. Platform architecture schematics illustrating the technology components of the MDHS System
T-03	The Contractor must execute testing in accordance with the MDHS-accepted Test Plan (D19), including use of a full-size database and simulated loads of a minimum of 3,500 concurrent users. MDHS System testing must continue until performance requirements (developed during JAD and JTD sessions and approved by MDHS) are met under full operational conditions.
T-04	The Contractor must document and report testing results in a System Test Documentation and Results Report (D20). The Contractor must document and maintain MDHS System test documentation, results reports, test cases, and test scripts for MDHS, FNS, OCSE, and other approved entities to review and audit. The report must include the following content:

Req. ID	Requirement Description
	a) Recommended improvements in the design, operation, and testing of the MDHS System and the impact on the MDHS System
	b) Detailed test results for each test, including:
	i. Test number
	ii. Summary of test results
	iii. Problems encountered
	iv. Identification of test procedure step(s) where problems occurred
	v. Reference to backup material as appropriate
	vi. Deviations from test cases/procedures
	vii. An assessment of the impact of deviations
	c) Test log with a chronological record of test events covered by the report, including:
	i. Date(s), time(s), location(s), and tester(s) of the tests performed
	ii. Hardware and software configuration used for each test
	iii. Record of MDHS sign-off on the completed and successful tests
	d) An overall assessment of the MDHS System's operation including:
	i. An overall assessment of the MDHS System's operation as demonstrated by the test results in the report
	ii. Identification of remaining deficiencies, limitations, or constraints that were detected by the testing performed (problem/change reports may be used to provide defect information)
	iii. For each remaining defect, limitation, constraint, or anomaly, describe:
	1. Impact on MDHS System performance, including identification of requirements not met
	2. Impact on MDHS System design
	3. Recommended solution/approach for correction(s)
	4. Identified resources needed to make correction(s)
T-05	The Contractor must update related deliverables to reflect refinements or additional requirements identified during MDHS System testing, in accordance with the project's change control process.

Req. ID	Requirement Description
T-06	The Contractor must document known defects uncovered in testing in the monthly Defect Remediation Report (D15).
T-07	The Contractor must notify MDHS, in writing, upon completion of Task 4, that the MDHS System contains no Severity One (S1) or Severity Two (S2) defects, and that the MDHS System materially conforms to MDHS requirements and deliverables.

17.9.   Task 5: User Acceptance Testing (UAT)

17.9.1. Overview

Task 5 involves validation of the MDHS System to ensure that the Contractor has developed and configured the solution in accordance with MDHS' requirements (as articulated in the MDHS System RTM [D7]) and fully complies with other system deliverables. A team of MDHS' subject matter experts will perform UAT activities; however, the Contractor must lead certain activities and participate in others as required by MDHS to ensure successful completion of UAT. MDHS will be responsible for identifying the participants involved in UAT and for the overall execution of UAT scripts and ad hoc UAT.

The MDHS System functionality must adhere to FNS 901 Handbook requirements, including Section 6.7.2. MDHS System functionality relevant to SNAP must completely satisfy all standards and requirements as outlined in the FNS SIRT guidance as well as state and federal SNAP policies and regulations. MDHS must validate that MDHS System components work together and approve operational readiness prior to the production implementation. UAT must include detailed tests of all requirements, features, and MDHS System operations. MDHS will use the Contractor's MDHS System test scripts and may modify them slightly to provide additional test coverage during UAT. Additionally, the Contractor and MDHS must include all MDHS System interfaces and data exchanges in UAT. UAT will continue until the agreed upon UAT exit criteria have been achieved.

The Contractor should be responsible for providing data, environments, and test scripts to MDHS for the successful execution of UAT. UAT test scripts should cover all facets of the system and the Contractor will be responsible for drafting all UAT test cases and scripts per scenarios and directions provided by MDHS.

The Contractor will support and review all UAT results with MDHS, and a mutual strategy for mitigation should be agreed upon for each defect based on severity, priority, and impact.

17.9.2. Objective

The objective of Task 5 is to ensure that the MDHS System meets all expectations of MDHS and all system users. As a prerequisite to UAT, the Contractor must ensure all requirements and related MDHS System functions have undergone unit and system testing. The Contractor must ensure all operational components (hardware, software, and network communications) of the MDHS System are functioning in accordance with MDHS' requirements.

17.9.3. Contractor's Responsibilities

Detailed requirements for fulfilling Task 5: UAT are included in Table 16.

Table 16: Detailed Requirements for Task 5: UAT

Req. ID	Requirement Description

UAT-01	The Contractor must develop a UAT Plan (D21) that aligns with FNS requirements. MDHS must accept the plan before UAT begins. The plan must include the following content:
	
	a) Pre-testing validation of functional requirements utilizing FNS SIRT guidance
	
	b) Test preparations, including at a minimum:
	
	    i. Test environment preparation plan
	    ii. Security and privacy requirements
	    iii. Testing location
	    iv. Unique tests by test identifier and a brief description of each test scenario
	    v. Hardware preparation plan
	    vi. Software preparation plan
	    vii. Training on UAT processes and testing tool(s)
	    viii. Other pre-test preparations, e.g., description of other pre-test personnel actions, preparations, or procedures necessary to perform UAT
	
	c) Schedule of Contractor personnel to support MDHS testing

Req. ID	Requirement Description

	d) Test descriptions to simulate workflow and validate that the MDHS System meets functional requirements. Test descriptions must include:
	
	    i. Unique identifier for each test case
	
	    ii. Prerequisite conditions
	
	    iii. Test inputs/outputs
	
	    iv. Expected test results/Acceptance criteria
	
	    v. Criteria for evaluating results
	
	    vi. Testing procedure (step-by-step)
	
	    vii. Assumptions and constraints
	
	    viii. Error reporting and remediation plan
	
	    ix. MDHS System documentation update plan
	
	e) Traceability from each test case to the detailed requirement it addresses and mapped back to the MDHS System RTM (D7); if a test case addresses multiple requirements, then traceability from each set of test procedure steps to the requirement(s) is addressed
	
	f) A summary of the tools and environments required for UAT to ensure that the test environment is ready for use in UAT; this task must include:
	
	    i. Verification that the test environment is populated with the latest version of code and contains all components the production environment requires, including copies of all software and database tables
	
	    ii. Connection of UAT tools and the environment to the MDHS network, appropriately configured, to adequately emulate production MDHS System use
	
	    iii. Inclusion of applicable third-party and test partner files in order to adequately test system-to-system interfaces

UAT-02	The Contractor must provide user interface screens/other interfaces to allow MDHS test participants access to the test environment.
UAT-03	The Contractor must deliver the test environment and ensure: a) The test environment is prepared with test data that mimics production environment data b) The test data is refreshed and managed as required by MDHS

Req. ID	Requirement Description
	c) The MDHS System is configured to the most current version of all underlying software, tools, and databases, unless otherwise approved by MDHS d) The UAT user accounts are configured and able to successfully access the test environment
UAT-04	In parallel with UAT, the Contractor must: a) Provide the tools necessary to test the MDHS System under maximum operational load conditions to verify production capability to meet the standards for SLA06: Response Time b) Conduct load and performance testing using Contractor-provided load and performance evaluation tools
UAT-05	The Contractor must remediate all defects identified during UAT and modify the associated deliverables before MDHS' approval and sign-off on Task 5.
UAT-06	The Contractor must provide training and documentation for UAT, including training to MDHS staff and other test participants on any automated testing tool(s). This might include versions of user materials that the Contractor must deliver under Tasks 6: ORT and 7: User Training. In addition, the Contractor must provide a method for test participants to submit test results, providing documentation of when actual results did not match the documented expected results.
UAT-07	The Contractor must develop a weekly UAT Results Report (D22) to include a summary and details on the overall progress and status of UAT, including the following content: a) Documentation of each problem, including the following content: i. Problem statement ii. Tester name iii. Expected result/Acceptance criteria iv. Actual result v. Date vi. Resolution provided vii. Name of person assigned to resolve the defect viii. Plan for further testing

Req. ID	Requirement Description

	ix. Summary of problems found
	
	    x. A weekly report of problem resolution progress to include:
	        1. Problems open
	        2. Problems resolved
	        3. New problems logged
	        4. Progress against the UAT Plan (D21)
	
	    xi. A detailed list of defects including the following:
	        1. Defects opened in the last week
	        2. All defects open
	        3. Defects closed
	        4. Details on all tests performed during the week
	        5. MDHS' acceptance status of defects that are closed
	
	b) Summary of UAT risks and risk status

UAT-08	The Contractor must develop and update the content of the ALM and SCM tools in the collaborative workspace based on changes made as a result of UAT. The tools must reflect MDHS System code as of the conclusion of UAT, including:
	
	a) Project source code (where applicable)
	b) Project tools (source code for nonproduction artifacts, e.g., conversion programs)
	c) Related code documentation
	d) "Seed Data" (data that needs to be loaded into the MDHS System for base system operations [e.g., lookup tables, rate tables, workflow rules])
	e) Maintenance of binary artifacts (these may be kept external, but must be maintained in a repository that is available to MDHS-designated members of the project team), including:
	    i. Libraries and third-party software components
	    ii. Frameworks
	    iii. Software binaries
	    iv. Other associated artifacts as needed to build, maintain, and deploy the MDHS System

Req. ID	Requirement Description
UAT-09	The Contractor must assist with UAT as defined in the UAT Plan (D21). The Contractor's UAT activities must: a) Provide MDHS System Help Desk support b) Correct defects in accordance with SLAs c) Assist MDHS in identifying problems discovered during UAT and in the resolution of those problems d) Report on UAT activities via UAT Results Report (D22) e) Conduct rework on Tasks 1 through 4 and update the associated deliverables
UAT-10	The Contractor must update deliverables to reflect refinements or additional requirements identified during UAT.
UAT-11	The Contractor must submit the updated MDHS System documentation and update the ALM and SCM tools as required.
UAT-12	The Contractor must document known defects uncovered in UAT in the monthly Defect Remediation Report (D15).
UAT-13	The Contractor must remediate all defects identified during UAT and modify the associated deliverables before the MDHS' approval and sign-off on Task 5.
UAT-14	The Contractor must notify MDHS, in writing, upon completion of Task 5 that the MDHS System contains no S1 or S2 defects, and that the MDHS System materially conforms to MDHS requirements and deliverables.

17.10. Task 6: Operational Readiness Testing (ORT)

17.10.1. Overview

Task 6 involves a methodical verification process performed in the pre-production (staging) environment prior to proceeding to production implementation. This test occurs after UAT and is designed to ensure the Contractor, MDHS, agency partners, and the MDHS System are adequately prepared for production operations. ORT also includes a demonstration and verification of physical security, data security, user profiles setup, and overall system security. The ORT must allow minimum of six (6) weeks for testing. Any problems or defects in the

application software will be addressed through the problem reporting process followed for all testing activities. Testing activities to be performed include:

- Converting legacy data

- Processing all inputs

- Determining eligibility

- Distributing correct benefits

- Generating correspondence

- Exchanging data with other agencies

- Executing batch processes

- Meeting all reporting requirements

- Ensuring functional components fully demonstrate backup capacity

The ORT is designed to confirm the following:

- The MDHS System adequately supports the most common business process (e.g., application processing, benefit issuance, document management, and correspondence generation)

- All necessary systems components are installed and operating correctly

- All known risk elements have been assessed, mitigated, transferred, deferred or accepted

- Personnel are capable of using and operating the system

- Support staff are prepared and sufficiently numbered to provide timely response to users

- Converted data is clean, accurate and does not create software performance or functional problems

- Real-time and batch interfaces are operational and functioning correctly

- Performance monitoring tools are installed and functioning correctly

- Reports are accurate

- Security profiles are correct

- Backup and recovery procedures are functioning correctly

17.10.2. Objective

The objective of Task 6 is to confirm that the MDHS System, and all parties that use and rely on the system, are ready for production operations. Successful completion of the ORT is required prior to adoption of the MDHS System within a production environment and commencement of O&M tasks.

17.10.3. Contractor's Responsibilities

Detailed requirements for fulfilling Task 6: ORT are included in Table 17.

Table 17: Detailed Requirements for Task 6: ORT

Req. ID	Requirement Description

ORT-01	The Contractor must develop an ORT Playbook (D23) which describes the testing activities, schedule, and responsibilities for all parties. ORT must allow six (6) weeks for testing. This will be the document that all participants will follow in the execution of the ORT. The ORT Playbook must, at a minimum, contain the following content:
	
	a) ORT summary and overview of the ORT. The ORT must include a full conversion data load to verify the capability of the MDHS System to accommodate a production capacity of cases. However, the ORT will only use a subset of converted cases. ORT must simulate three (3) months of production operations in the following sequence:(Note: two [2] weeks of testing is representative of a one [1] month time frame.)
	
	   i. ORT Simulation 1: The first two (2) week testing period will focus on conversion, online processes (application entry, document uploads, case disposition, etc.), and real-time interfaces
	
	   ii. ORT Simulation 2: The second two (2) week testing period will continue ORT Simulation 1 activities and introduce daily/weekly batch processing, batch interfaces, and document generation
	
	   iii. ORT Simulation 3: The third two (2) week testing period will continue ORT Simulation 1 and ORT Simulation 2 activities, and introduce monthly processes, QA/Quality Control (QC) activities, appeals, recertification(s), financial adjustments, reporting, and other support functions. ORT will continue without additional Contractor compensation until the agreed-upon ORT exit criteria

Req. ID	Requirement Description
	has been achieved. At the completion of ORT, the testing must demonstrate that MDHS, the Contractor, and partner agencies' staff are prepared for O&M support. Operational readiness must also include a demonstration and verification of system performance, system security, and system performance. Any problems or defects in the application software will be addressed through the problem reporting process followed for all testing activities

b) ORT scope includes the following:

    i.   Conversion of legacy data

    ii.   Processing of all inputs

    iii.   Determination of client eligibility

    iv.   Distribution of correct benefits

    v.   Generation of correspondence

    vi.   Exchange of data with other agencies

    vii.   Execution of batch processes

    viii. Validation of reporting requirement adherence

    ix.   Use a properly functioning data communications network

    x.   Demonstration of backup and restoration capacity

c) Documentation of a testing approach that includes:

    i.   Participants, stakeholders, and roles

    ii.   List of reference documents

    iii.   Assumptions

    iv.   Constraints

    v.   Risks

    vi.   Testing approach

    vii.   Participant training

    viii. Test preparation

    ix.   Test schedules, including:

        1.   ORT Simulation 1

        2.   ORT Simulation 2

        3.   ORT Simulation 3

Req. ID	Requirement Description
	x. Test execution steps
	xi. Cross team collaboration methodology
	xii. Entrance and exit criteria
	xiii. Backup and recovery
	xiv. Security
	xv. Conversion approach
	xvi. Interfaces coordination and execution
	xvii. Reporting
ORT-02	The Contractor must develop the ORT Results and Readiness Assessment (D24) to evaluate the outcome of the ORT and provide an assessment of the MDHS System, the MDHS organization, and the Contractor's capability to implement and provide O&M support services. Prepare the MDHS System environment for ORT, including at least: a) Test environment preparation configuration b) Security setup configuration c) ORT software build and deployment d) Training participants on ORT processes and testing tool(s) e) Conduct conversion transformation, load and confirmation f) Preparation of third-party and test partner files in order to adequately test interfaces
ORT-03	The Contractor must provide training and documentation for ORT, including training to MDHS staff and other test participants.
ORT-04	The Contractor must provide updates to the Weekly Status Report which summarizes the progress and status of ORT, including the following content: a) Documentation of any significant problems (e.g., S1 and S2) b) Problems open c) Problems resolved d) Progress against the ORT Playbook (D23) e) Status of ORT risks and risk status
ORT-05	The Contractor must assist with ORT as defined in the ORT Playbook (D23). The Contractor's ORT activities must include:

Req. ID	Requirement Description
	a) Providing MDHS System Help Desk support
	b) Correcting defects in accordance with SLAs
	c) Assisting MDHS in identifying and resolving problems discovered during ORT
	d) Correcting reported defects in accordance with SLAs
ORT-06	The Contractor must document known defects uncovered in ORT in the resolution and a corrective action plan for those problems.
ORT-07	The Contractor must execute batch processes and interfaces.
ORT-08	The Contractor must report on ORT activities via ORT Operational Readiness Test Results and Readiness Assessment (D24).
ORT-09	The Contractor must conduct rework on Tasks 1 through 4 conducting re-work, as needed, and updating relevant deliverables.
ORT-10	The Contractor must update MDHS System documentation and ALM and SCM tools as required.
ORT-11	The Contractor must document known defects uncovered in ORT in the monthly Defect Remediation Report (D15).
ORT-12	The Contractor must provide an ORT System Demonstration (D25) showing full MDHS System functionality and verification of MDHS System performance and security.
ORT-13	The Contractor must notify MDHS, in writing, upon completion of Task 6, that the MDHS System contains no S1 or S2 defects, and that the MDHS System materially conforms to requirements and deliverables.

17.11. Task 7: User Training

17.11.1. Overview

Task 7 involves training designated MDHS stakeholders on the MDHS System in preparation for production launch of functionality for the program areas (e.g., SNAP, TANF, etc.). Educating users on new MDHS System functionality, the updated user interface, and on modified data entry processes is imperative for a smooth transition to the use of the MDHS System.

MDHS expects the Contractor to begin work on this task and the associated deliverables prior to the start Task 5 and provide training throughout the O&M period. MDHS anticipates that the Contractor will conduct most of the user training activities immediately prior to implementation, while making training available to MDHS' stakeholders after Task 5 and throughout the Contract term. MDHS requires that staff use preliminary training materials during UAT to verify the accuracy, comprehensiveness, understandability, and usability of the materials. The Contractor must update the materials after UAT in response to MDHS' feedback and must also modify the materials as needed to support changes during implementation.

To ensure delivery of user training during Task 7, the Contractor must first conduct a Train-the-Trainer Training (D29) for the training staff on how to use the MDHS System and on the associated Training Materials (D26). The number of MDHS trainers that will require training will vary by program area. After successful completion of the train-the-trainer activities, the Contractor must partner with the MDHS training staff to conduct joint field trainings in MDHS offices as delineated in the Implementation Plan (D31). The Contractor must prepare initial login administration for approximately 3,500 users. MDHS expects that trainings will include a combination of both on-site classes (held in 10 locations, including the MDHS central office and 9 regional offices throughout the state) and remote, web-based classes. The MDHS training staff will train all other MDHS System users.

17.11.2. Objective

The objective of Task 7 is to ensure all MDHS System users have an adequate level of knowledge, skill, and ability to perform their job functions using the MDHS System. The Contractor must develop a Training Plan (D27) and Training Materials (D26). Training materials should include handouts, instructions or training outlines, classes, presentations, and on-demand videos.

17.11.3. Contractor's Responsibilities

Detailed requirements for fulfilling Task 7: User Training are included in Table 18.

Table 18: Detailed Requirements for Task 7: User Training

Req. ID	Requirement Description
UT-01	The Contractor must develop a Training Plan (D27), and subsequent updates to the plan no less than quarterly throughout the duration of the project. The plan

Req. ID	Requirement Description
	must align with the FNS 901 Handbook, Section 3.5.32 requirements. The Contractor must obtain written MDHS approval before implementing the plan or any of its subsequent revisions. The Contractor must deliver training in accordance with the approved plan, which must include the following content: a) Training objectives b) Identification of key personnel and other staff responsible for the work c) Identification of trainee roles and applicable training content d) Identification of necessary training scripts and content e) Identification of training approach and various training formats, including: i. Train-the-trainer hands-on training sessions (on-site and remote) ii. General hands-on user training sessions (on-site and remote) iii. Initial hands-on, on-site training iv. Follow-up question and answer sessions, to be completed within two (2) weeks of each training v. Subsequent web-based training vi. Online support vii. Telephone and email support (or combinations thereof) f) Explanation of how the Contractor will use computer-based training, classroom training, and the combination of the two (2) modalities to provide training g) Estimation of the number of trainees via each modality h) Description of training session logistics, including where and when the sessions must take place i) Inclusion of a strategy and plan for ongoing training for: i. Training new staff ii. Training to address refinements to services and new services, as the outcome of additional MDHS System configuration and/or development j) Strategy to evaluate the effectiveness of the training and the approach to revise future training accordingly as needed

Req. ID	Requirement Description

	k) Explanation of essential knowledge and skills users must have to make full use of MDHS System functionality, accompanied by a description of the following materials:
	
	    i. Technical and user training materials
	
	    ii. User quick-reference guides
	
	    iii. On-demand training videos
	
	    iv. Online help
	
	    v. Release notes
	
	    vi. Test/training scenarios and scripts
	
	    vii. Other documentation necessary to use and operate the MDHS System

UT-02	The Contractor must develop and maintain Training Materials (D26) for user training through a process that includes gathering input from program SMEs as part of process of conducting course-specific design sessions. The materials will include visuals, handouts, workbooks, manuals, computerized display (videos), quick reference guides, frequently asked question (FAQ) guides, demonstrations, and online help.
UT-03	As training materials and system enhancements occur, the Contractor will assist in the revision of all affected MDHS policy and program manuals.
UT-04	The Contractor must make the user's manual available in a trainer's version and in a student's version. Training staff must use the trainer's version to deliver training to MDHS System users.
UT-05	The Contractor must design Training Materials (D26) for hands-on use in a classroom, lab situation, and/or for future reference by users when the MDHS System is operational. All Training Materials (D26) become the property of MDHS, and MDHS must review and accept the materials before use. It is expected that MDHS will assume responsibility for maintaining training materials after MDHS System implementation. Training Materials (D26) must include: a) Training objectives b) Training scenarios c) Tools to evaluate if trainees have effectively acquired the skills and understanding necessary to carry out their job functions

Req. ID	Requirement Description
	d) Training manuals that parallel the content of user and procedure manuals
	e) User training manual and training materials
	f) Instructor guides
	g) Classroom exercises
	h) Glossary
	i) Student evaluation forms for all training sessions
	j) Descriptions of audio/visual presentations and web-based tutorials
UT-06	Develop and maintain training curricula and materials, including train-the-trainer materials, appropriate for adult learners of all levels, conducted in compliance with standards for security and training (including ADA 508 compliance). Curricula and material must cover the following topics: a) MDHS System public portal overview b) MDHS System worker portal overview c) MDHS System benefits d) MDHS System business functions e) Data entry and validation f) Data correction and user help features g) Record update procedures h) Data inputs, outputs, and reports generated i) Report contents and report generation, including ad hoc reporting, search, and inquiry features j) User manual contents and usage k) Online help l) Other documentation necessary to use the MDHS System
UT-07	After Training Materials (D26) are developed, the Contractor must store materials in the collaborative workspace and apply the configuration management process used for all MDHS System documentation. The Contractor must keep Training Materials (D26) current with MDHS System functionality.
UT-08	The Contractor must develop a secure training environment and relevant documentation that the Contractor must use in executing the Training Plan (D27). The training environment must allow for the training of users on the MDHS

Req. ID	Requirement Description
	System without disruption of any other MDHS computing activities and must fully support all user training needs.
UT-09	The Contractor must manage the training environments and make it available to MDHS throughout the life of the Contract. The training environment must be configured to allow training data to be expeditiously refreshed between training sessions or as needed.
UT-10	The Contractor must provide Train-the-Trainer Training (D29) for up to fifty (50) MDHS training staff (i.e., train-the-trainer) on how to use the MDHS System and on the associated Training Materials (D26) as specified.
UT-11	The Contractor must update Training Materials (D26) and release notes (all formats) to reflect MDHS System modifications and changes that result from all MDHS System enhancement activities no later than fifteen (15) business days from the time the change is made.
UT-12	The Contractor must develop a User Training Report (D28), which documents the satisfactory completion of the Training Plan (D27) tasks for training MDHS trainers. The report must include a description of the method for reporting, reviewing, and correcting discrepancies identified during trainings. The report must include the following content: a) Names of the persons trained b) List of persons who were scheduled for training who did not attend c) Training date d) Length of training e) Contractor's comments regarding the training session f) Identification and resolution of training discrepancies g) Training evaluation regarding the effectiveness of the training using industry standards h) The Contractor's recommended changes to the approved Training Plan (D27) and Training Materials (D26), inclusive of any changes requested by the MDHS
UT-13	The Contractor must document any known defects uncovered in Task 7 in the monthly Defect Remediation Report (D15).

Req. ID	Requirement Description
UT-14	The Contractor's training must be customized to meet the specific training needs of each type of user using the MDHS System.
UT-15	The Contractor must offer and provide user training through a variety of methods to meet the needs of the learner, including accessibility. This must include, but not be limited to, in person, online, guided online seminar, and recorded online seminar.
UT-16	The Contractor must maintain a record of individuals who have completed the System training. Documentation must include the name of the individual trained, the date of training, and the specific training completed (e.g., for what type of user). The Contractor must make the training records accessible to the MDHS.
UT-17	The Contractor must notify MDHS, in writing, upon completion of Task 7 that the user training for the MDHS System materially conforms to MDHS requirements and deliverables.

17.12. Task 8: Implementation Planning and Execution

17.12.1. Overview

Task 8 involves the Contractor implementing the MDHS System functionality upon written notice to proceed from MDHS. At the conclusion of the implementation task and again at the end of the Contract, the Contractor must guarantee that the MDHS System is fully implemented and operational, in alignment with FNS and other federal requirements. MDHS must review the Implementation Plan (D31) to determine if and when the Contractor and MDHS must conduct additional activities prior to the rollout.

17.12.2. Objective

The objective of Task 8 is to develop the Implementation Plan (D31) and artifacts required to put the tested MDHS System into a production pilot—for a minimum of three (3) months—and then into operations with minimal disruption to system users.

17.12.3. Contractor's Responsibilities

Detailed requirements for fulfilling Task 8: Implementation Planning and Execution are included in Table 19.

Table 19: Detailed Requirements for Task 8: Implementation Planning and Execution

Req. ID	Requirement Description
IPE-01	The Contractor must perform an Implementation Readiness Assessment (D30) prior to production pilot and again prior to implementation. The assessment must align with the FNS 901 Handbook Go/No-Go Decision Check List. The Contractor must document and provide support information, data, and rationale, updated as necessary and appropriate, indicating that the MDHS System is ready for production pilot and implementation and that the following activities are completed: a) Missed requirements are developed and functioning in the test environment and are ready to move to the production environment b) MDHS System meets performance standards and functions in accordance with requirements c) MDHS staff have been appropriately trained and prepared d) MDHS partners have been appropriately trained, notified, and prepared e) MDHS System is ready for the production pilot and Statewide use by the MDHS in the production environment f) Any additional functionality required for federal certification is functioning in production, or is in development in accordance with the priority set by the ESC
IPE-02	The Contractor must develop an Implementation Plan (D31) that details the Contractor's approach to implementing the MDHS System functionality in production and incorporating any lessons learned during MDHS System testing. The plan must include the following content: a) Sequenced tasks and processes, Contractor and MDHS staff responsible for each task and process, and the duration and schedule of each task/process necessary for: i. Initializing the MDHS System ii. Implementing and conducting the production pilot iii. Post-pilot roll-back iv. Post-pilot implementation rollout v. Post-pilot implementation roll-back

Req. ID	Requirement Description
	b) Description of an implementation coordination team, composed of Contractor and MDHS staff, to coordinate and review the implementation preparation and execution
	c) Criteria for the MDHS System production pilot and implementation rollout readiness
IPE-03	The Contractor must facilitate weekly implementation status meetings with MDHS and agency partners that begin at least six (6) weeks prior to the planned implementation. Implementation status sessions should at a minimum address the following: a) Implementation tasks and status b) Action Items status c) Issues and decisions status d) Status of any defects that have the potential of postponing implementation e) Active risks and mitigation activities
IPE-04	The Contractor will establish a command center to provide go-live support during each implementation phase of the MDHS System.
IPE-05	The Contractor must deliver an Implementation Report (D32) at least once, following rollout. The format and level of detail for this report must reflect input from MDHS. The report must include the following content: a) Tasks accomplished in preparation for implementation and the MDHS System's and MDHS' state of readiness b) Confirmation of satisfactory implementation of the MDHS System, including documenting the significant data, events, and information related to the rollout of the MDHS System to MDHS
IPE-06	The Contractor must configure the production environment and necessary documentation that the Contractor must rollout during the implementation task. The production environment must: a) Meet mandatory functional requirements b) Meet mandatory technical requirements c) Comply with the System Architecture Document (D8) and the Security Plan (D12)

Req. ID	Requirement Description
	d) Meet performance objectives as documented in the SLAs
	e) Be fully maintainable, integrated, and secure, and contain all of the hardware, software, network communications, and data storage components necessary for ongoing operations of the MDHS System that meet all program needs
	f) Allow for O&M enhancement of the MDHS System without disruption of any other MDHS computing activities. The production environment and documentation must include the following content:
	i. Inventory of the hardware, software, network communication, and data storage components necessary to support ongoing operations of the MDHS System
	ii. List of configuration, security, and change management processes
	iii. Outbound and inbound data exchange connections
	iv. Platform architecture schematic that illustrates the technology components of the MDHS System
IPE-07	The Contractor must document any known defects uncovered in Task 8 in the monthly Defect Remediation Report (D15).
IPE-08	The Contractor must notify the MDHS, in writing, upon completion of Task 8, that the MDHS System materially conforms to MDHS requirements and deliverables.

17.13. Task 9: DDI Closeout

17.13.1. Overview

Task 9 involves completion of project closeout activities for DDI, including performing a review of lessons learned and developing closeout documentation for each implementation phase.

17.13.2. Objective

The objective of Task 9 is to ensure all lessons learned are shared with the project team, including O&M stakeholders, and that all MDHS System artifacts are archived and stored in the original format in an MDHS-owned document repository.

17.13.3. Contractor's Responsibilities

Detailed requirements for fulfilling Task 9: DDI Closeout are included in Table 20.

Table 20: Detailed Requirements for Task 9: DDI Closeout

Req. ID	Requirement Description

DC-01	The Contractor must conduct project closeout responsibilities and develop a DDI Closeout Report (D33). The report must consist of the following:
	a) Major accomplishments
	b) Deliverables checklist
	c) Performance to schedule, including:
	    i. Lessons learned
	    ii. Outstanding risks or issues that MDHS and O&M stakeholders must address

DC-02	The Contractor must conduct lessons learned sessions with MDHS project stakeholders, and document the lessons learned with findings and recommendations.
DC-03	The Contractor must confirm MDHS' acceptance of all required project deliverables.
DC-04	The Contractor must update and provide all project documents in their native formats (MS Word, PowerPoint, Excel, Project).
DC-05	The Contractor must develop a Post-Implementation Evaluation Report and deliver all materials developed in the course of the project. This will include complete documentation, source code, and other materials, as well as client/program data, as appropriate and applicable. The Contractor shall provide verification and certification that specifies all software, policies, security requirements, procedures, reporting, and equipment are functioning as planned and that all documentation is complete has been received and approved by MDHS.
DC-06	The Contractor must ensure MDHS System artifacts are archived in the MDHS-owned repository.

18. SI Services

18.1.　Overview

SI services involves connecting disparate applications from multiple vendors, cloud-based software solutions, and data storage across internal and external resources and ensuring those components integrate well into the MDHS landscape. SI Services also includes managing and maintaining the integrated applications, systems, and their compatibility and compliance to MDHS, State, and federal standards and industry best practices.

18.2.　Objective

The objective of SI services is to integrate different subsystems into a single integrated solution and ensure that they work together as planned. Using evolving industry best practices and ensuring that those subsystems function together and help automate the monitoring, control, delivery, and management of services for MDHS.

18.3.　Contractor's Responsibilities

Detailed requirements for fulfilling SI services are included in Table 21.

Table 21: Detailed Requirements for SI Services

Req. ID	Requirement Description
SI-01	The Contractor must use tools and services to assess, monitor, and maintain data integrity, including conducting data anomaly analysis on a weekly basis.
SI-02	The Contractor must collaborate with MDHS to create, maintain and implement a Data Management Plan (S1). The plan must define data management practices and tools that comply with MDHS standards. At a minimum, the plan must document the processes, techniques, and products needed to ensure optimal management and sharing of enterprise information for MDHS System. The plan must cover major areas of operational management of MDHS System data including: a)　Data governance and classification planning b)　Data sharing principles c)　Data security d)　Data ownership and data model maintenance of operational and business data

Req. ID	Requirement Description
	e) Data management practices and tools used in data sharing or exchange with MDHS System and other systems or partners f) Data dictionary, including data naming conventions, as mutually agreed upon with MDHS
SI-03	The Contractor must create and maintain a Data Retention Plan (S2) that documents the processes, techniques, and products needed to ensure proper data retention in compliance with all federal and State guidelines and requirements and MDHS policies and standards. Content must include, but not be limited to: a) Retention and disposition responsibilities b) Approach to archival and disposal processes c) Definition of technical effort d) Risks and strategies to mitigate them e) Retention and disposition schedules to ensure timely flow of data f) Approach and process to manage the integrity of the data retention process
SI-04	The Contractor must maintain a MDHS-approved data anomaly/integrity checker to monitor the production environment. The Contractor must run the checker regularly, proactively identifying system issues and defects based on the results and working with MDHS to resolve each data anomaly. The Contractor must identify data fixes and other mitigation strategies to resolve the data anomalies.
SI-05	Contractor must collaborate with MDHS to update data artifacts, including: a) Logical Data Model b) Physical Data Model
SI-06	The Contractor will develop and maintain a System Integration Plan (S3) that describes the approach to design, develop, integrate and operate system integrations.
SI-07	The Contractor will provide configuration services to test and implement the system integrations needed throughout the project and throughout the term of this Contract. This includes configuration of each platform environment, security management and test participation.
SI-08	The Contractor must provide and maintain a Service Registry to catalog and document all web services, microservices etc.

Req. ID	Requirement Description
SI-09	The Contractor must use open standards and loosely coupled tools (industry standards) where possible and avoid tools that are proprietary and/or vendor locked.
SI-10	The Contractor must use federally approved secure and encrypted communication channels for web services, APIs, and other interfaces, including file transfers and data interchanges.
SI-11	The Contractor must implement system changes using loose coupling and modular design wherever possible, based on Industry standards for modular upgrades. At a minimum, the loosely-coupled modular design process must include: a) Description of the modular design change b) Expected outcome(s) c) Description of services required for the change d) Proposed services and deliverable acceptance process
SI-12	The Contractor must document and maintain a comprehensive Development Guide including: a. Set up of development supporting software (rules engines, Service-Oriented Architecture [SOA], etc.) b. Development procedures c. Use of diagrams such as object interaction diagrams d. Use of coding standards and industry best practices
SI-13	The Contractor must implement secure and automated code build and deployment practices to all appropriate test environments and production, including security zones and internal controls.
SI-14	The Contractor must implement secure and automated code build and deployment practices to all appropriate test environments and production, including security zones and internal controls.
SI-15	The Contractor must automate manual processes, including: a) Release of code/build process b) Testing c) Patching d) Secure configurations

Req. ID	Requirement Description
	e) Communication, reporting, and notifications
	f) Repetitive tasks
SI-16	The Contractor must facilitate the adoption of new industry-standard test and development best practices.
SI-17	The Contractor must implement system changes using loose coupling and modular design wherever possible, based on Industry standards for modular upgrades. At a minimum, the loosely coupled modular design process must include: a) Description of the modular design change b) Expected outcome(s) c) Description of services required for the change d) Proposed services and deliverable acceptance process
SI-18	The Contractor must monitor and coordinate with interfacing partner (e.g., IRS, etc.) system changes and implementation.
SI-19	The Contractor must collaborate with MDHS divisions, federal partners, and other State agencies to address integration problems, changes in laws and business practices, potential risks, and other factors that impact (or have the potential to impact) service delivery and compliance.
SI-20	The Contractor must assess functionality in the code, ensuring that remediation actions are tracked in MDHS-approved ALM tools.
SI-21	The Contractor must produce, analyze, maintain, and compare quality software engineering metrics across the project in a single easy-to-access repository that contains all software assets.
SI-22	The Contractor must use built-in automated test suites to support confirmation of regression tests (unit and integrated testing).
SI-23	The Contractor must conduct system check activities as part of each MDHS System production release. These activities will confirm that the production system is working as planned before the public can access the website or the mobile application. This includes, but is not limited to: a) Performing MDHS System infrastructure health checks b) Conducting SoapUI and/or REST tests for all services c) Conducting connectivity tests

Req. ID	Requirement Description
	d) Conducting batch review and validation
	e) Conducting application validations limited to anonymous browsing

19. O&M Services and Enhancements

19.1.   Overview

The Contractor must provide O&M for the MDHS System and also improve the MDHS System by addressing identified deficiencies and defects and implementing MDHS System enhancements to better support the programs

Table 22 provides a summary of MDHS' business needs for the O&M base and optional Contract years.

Table 22: Summary of Business Needs

Area of Need	Description
Operate and Maintain the MDHS System	The Contractor must provide O&M services in adherence with the O&M requirements and SLAs.
Ensure Compliance with State and Federal Policies and Requirements	MDHS System updates and fixes to the current functionality ensure compliance with all federal and State requirements.
Increase Effectiveness, Performance, and Efficiency	MDHS System updates and fixes to the current functionality increase effectiveness and efficiency in eligibility determination and service delivery.
Improve Integration with External Systems	All real-time and batch interfaces operate without human interaction, interruption, or data corruption.
Improve Reporting Capabilities	Reporting capabilities allow MDHS to be a user-friendly, flexible, and robust reporting tool to address quick response requests for information from the State legislature, Governor's office, and MDHS executive management.

19.2.   Objective

O&M and enhancements serve to ensure the Contractor provides the proper level of O&M service, including meeting the performance standards identified in the Contract. This includes identifying an appropriate level of Contractor staffing resources, and ensuring that they are available to reliably operate, maintain, update, and enhance the MDHS System.

MDHS' goal and objectives for implementation of each phase is to first stabilize, and then work with the Contractor to develop plans to address deficiencies and implement enhancements.

A twelve (12)-month warranty, or stabilization, period will follow each implementation phase of the MDHS System. During the stabilization period, MDHS will only authorize enhancements required by State or federal mandate(s). Stabilization allows Contactor O&M staff to focus on achieving performance requirements and remediation of defects that impact the use of the MDHS System by MDHS workers and clients. The Contractor's monitoring, reporting, and response to MDHS System availability, defects, response times, and other performance problems will be the basis upon which MDHS will consider forgiveness of SLA failures during the stabilization period. Stabilization is only achieved if the Contractor is in compliance with the following SLAs:

- SLA04: Defect Remediation

- SLA05: System Availability

- SLA06: Response Time

If the final month of the stabilization period results in MDHS System availability, defect remediation, or response time penalties, then the MDHS System is not sufficiently stable to proceed with enhancement. Therefore, the stabilization period will extend on a month-to-month basis until stabilization is achieved.

19.3.   Contractor's Responsibilities

Detailed requirements for fulfilling O&M Services and Enhancements are included in Table 23.

Table 23: Detailed Requirements for O&M Services and Enhancements

Req. ID	Requirement Description
OM-01	The Contractor must develop, maintain, and implement an O&M Plan (O1) that documents how the Contractor will address O&M requirements. The plan must identify and describe the Contractor's strategy and approach to providing the required O&M support for the MDHS System. The Contractor must update the plan as requested by MDHS to reflect evolving services, priorities, and resources. The plan must also describe how the Contractor will coordinate O&M and other tasks leading up to O&M. The plan must include the following:

Req. ID	Requirement Description
	a) Processes and procedures needed for day-to-day MDHS System operations, including the following:
	i. MDHS System troubleshooting and MDHS System tuning procedures and features
	ii. Processes and procedures for implementing common types of MDHS System enhancements (e.g., adding a workflow, building a new notice template, changing the valid values for a lookup, adding document types, and changing database objects)
	iii. Software management functions, such as building code and code management
	iv. System interface processing, including API documentation and data exchanges with other systems
	v. Online and batch processing procedures
	vi. MDHS System backup and recovery procedures
	vii. Security procedures, scans, logs, and automated security tools
	viii. Setting and changing MDHS System password and user ID
	ix. Managing user permissions and roles
	x. MDHS System processing procedures
	xi. MDHS System menu structures and MDHS System command mode operations
	xii. Job scheduling
	xiii. Job cycles (daily, weekly, monthly, quarterly, annually, and special)
	xiv. Database maintenance and performance optimization management
	xv. Log management
	xvi. Third-party software upgrades
	xvii. Error recording, reporting, and troubleshooting procedures
	b) Batch job standards and online technical support standards
	c) Necessary tools to capture and report on SLAs and facilitate tracing/observability of the health of the MDHS System
	d) Tasks necessary to establish the technical support team for equipment and data communications problem solving

Req. ID	Requirement Description
	e) Contractor technical support Help Desk management plan
	f) Processes through which the Contractor will deliver system documentation updates, including the methodology for updating and reviewing documentation, the schedule upon which the Contractor will update documentation, tool(s) used, staffing allocated for storing and updating documentation, and how the Contractor will ensure compliance with version control protocols
	g) Security management plan, with a comprehensive overview of the approach to MDHS System and data security (specifying the standards and methodology for securing access to the MDHS System, the software, and the data)
	h) Standards for the security components of services
OM-02	The Contractor must develop, maintain, and implement an O&M Work Plan and Schedule (O2), including schedule dates for all O&M procedures scheduled for the next six (6) months. The plan must include all tasks for preparation (ordering, installation, testing, etc.) and milestones that show when execution will be complete.
OM-03	The Contractor must develop a monthly O&M Status Report (O3) to report on MDHS System support activities. The report must consist of the following: a) Status of SLAs and performance standards b) Status of operational activities c) Help desk reporting d) Status of tasks, staff assignments, and schedule of work for the upcoming month e) Status of the work underway f) List of tasks completed in the prior month g) List of system operation problems
OM-04	The Contractor must provide O&M services in accordance with the agreed-upon service levels included in the SLAs and other O&M requirements. This includes: a) Setting up and executing batches and interfaces b) Running and distributing electronic reports c) Performing data backup and restores (when necessary)

Req. ID	Requirement Description
	d) Monitoring and tuning performance
	e) Providing critical incident response
	f) Maintaining all MDHS System documentation (e.g., third-party products, version, licensing costs, and expiration dates, and MDHS System custom software inventory with current version and change logs); the Contractor must update and save all MDHS System documentation changes to the collaborative workspace within thirty (30) days of modification
OM-05	The Contractor must develop a monthly Jobs Exceptions Report (O4) that reports on batch processes, including interfaces that experienced execution and data exception errors. All batch processes that fail to meet the performance standard specified in SLA15: Batch Processing must be listed in the report. The report must include a list of the fixes implemented and any Contractor recommendations for fixing the problems in the future.
OM-06	The Contractor must monitor performance, including providing performance-monitoring software, management, and reporting in accordance with SLA05: System Availability, and SLA06: Response Times. The Contractor must report the following information regarding MDHS System availability in the monthly O&M Status Report (O3): a) Each segment of downtime minutes by day during the scheduled availability period b) Components affected by each segment of downtime c) Environment(s) involved in downtime (test, training, staging, etc.) d) Weekly total of downtime minutes occurring for the week during scheduled availability periods e) Cause of downtime
OM-07	The Contractor must develop, maintain, and implement an Infrastructure and System Software Support Plan (O5).
OM-08	The Contractor must resolve defects as prioritized by MDHS and in accordance with the timelines specified in the SLAs for remediation by severity level and working with MDHS to review and validate the identified defects and other problems in the production and all other environments. The Contractor must provide level of effort estimates for all assigned defects, other than S1. At the request of the Contractor, MDHS might allow temporary forgiveness of SLA04:

Req. ID	Requirement Description
	Defect Remediation in the event one (1) or more System Requests (SRs) require allocation of a portion of the O&M staff to meet critical business needs. However, the Contractor must maintain O&M staff to meet all other operational service levels for S1 and S2 defects, system availability, and performance at all times. Prior to beginning work on S2, S3, or S4 defects, MDHS will review the level of effort estimates and defect descriptions. MDHS might request that some defects are given resolution order preference, but the Contractor is ultimately responsible for determining the most efficient and effective approach for resolving all defects to comply with the SLAs.
OM-09	The Contractor must develop and provide a monthly Defect Remediation Report (O6), including a summary of the defects reported, fixed, and backlogged for the month. MDHS will use this report to determine compliance with the SLA04: Defect Remediation
OM-10	The Contractor must maintain DDI-related deliverables (e.g., Software Development Guide, Test Plan, and UAT Plan). The Contractor will perform DDI for approved SRs, work with MDHS to review and validate requested and approved SRs, and develop an implementation schedule for each SR. MDHS will prioritize SRs in accordance with the approved change control process.
OM-11	The Contractor must provide annual updates to the Security Documentation. The production system and any environments that contain unmasked production data must accommodate the Federal Tax Information (FTI) and MARS-E 2.0 or the latest version requirements. The Contractor must maintain and update security documents to reflect new requirements from federal partners (including FNS, SSA, IRS, etc.).
OM-12	The Contractor must provide ongoing security management for the MDHS System and performing an annual Security Test (O7) which includes penetration and vulnerability testing.
OM-13	The Contractor must address and resolve risks related cloud-hosting.
OM-14	The Contractor must provide cloud-based infrastructure to support business continuity and disaster recovery services in accordance with SLA07: Disaster Recovery.
OM-15	The Contractor must maintain a Business Continuity and Disaster Recovery Plan (O8), to include a disaster recovery testing plan, and perform a Disaster Recovery

Req. ID	Requirement Description
	Test (O9). The test is an annual test of the capability to transfer the production environment to the disaster recovery environment and proceed with production processing without loss of data.
OM-16	The Contractor must update Training Materials (O10) based on implemented SRs and other MDHS System changes.
OM-17	The Contractor must develop a Federal Certification and Review Management Plan (O11) for achieving FNS and OCSE certification of the MDHS System related to SNAP and Child Support functionality and providing Federal Certification and Review Supporting Documentation (O12) to support certification. The plan must include Contractor and the MDHS certification tasks and schedule. The Contractor must manage the tasks through successful certification of the MDHS System. The Contractor must meet with MDHS regularly and collaborate to discuss and resolve compliance problems and associated service delivery changes.
OM-18	The Contractor must conduct a post-implementation audit to evaluate the project's goals and achievements, including: a) Validation and confirmation that the implemented MDHS System meets MDHS' vision and original project objectives and budget b) Determination of satisfaction of the MDHS' stakeholders c) Validation and confirmation of successful completion of final deliverables d) Recertification against the FNS SIRT e) Creation of an action plan for any gaps identified during the post-implementation audit f) Identification of areas for further development, along with benefits and risks, for future consideration g) Identification of lessons learned for potential MDHS utilization in future projects h) Findings and recommendations
OM-19	The Contractor must transfer the ownership of the platform to the MDHS.
OM-20	The Contractor must assist MDHS in interpreting future federal and State laws, policies, and requirements and estimating their impact on the MDHS System and service model.

19.4. Supporting Information

19.4.1. Enhancements/SRs

MDHS envisions the process for enhancements/SRs as follows:

1. Potential enhancements are reviewed by MDHS, which approves SRs for requirements gathering via JAD sessions. Requirements gathering is collaborative between MDHS and the Contractor to develop the SR.

2. The SR is developed as follows:

    i. The Contractor and MDHS draft the SR, which includes the requirements collected during the JAD sessions and business rules needed to describe the change

    ii. MDHS reviews the SR and gives approval for the Contractor to develop a "not-to-exceed" (NTE) estimate for the level of effort and time and materials costs required to complete the SR

    iii. The Contractor develops the NTE estimate

    iv. MDHS reviews and approves or denies the SR

3. Completing approved SRs is as follows:

    i. The Contractor creates a schedule for development, including start date, finish date, and UAT dates

    ii. The Contractor conducts development, unit testing, and system testing

    iii. The Contractor migrates the changes to the UAT environment

    iv. MDHS conducts acceptance testing, and if successful, gives approval to implement

    v. The Contractor migrates the changes to production and the training environment according to the schedule

The Contractor JAD participation will be limited to one (1) person whose cost is included in the monthly O&M fixed cost. JAD participation and the estimate preparation is not billable. Estimates will be treated as a NTE fixed cost. MDHS will not pay for any development conducted ahead of the estimate approval. After MDHS approves the SR for development, the Contractor is responsible for defining targeted dates for completing the work.

The Contractor must resolve all defects discovered during Contractor unit and system testing prior to migration to UAT. The Contractor must provide documentation of all system and regression tests conducted prior to migration to UAT. MDHS is not responsible for identifying or paying for defects introduced during development and maintenance and missed during the Contractor's and MDHS' testing. The purpose of UAT is to confirm that all SR requirements are met and that tickets are resolved. MDHS will report defects encountered during UAT as new tickets, which might prevent or delay the migration of tickets, SRs, or an entire build to production.

Defects missed during Contractor testing and UAT and then migrated into production will be added to the defect log and counted against the monthly SLA backlog standards. For all test cycles to be executed by MDHS, the Contractor must assist by providing applicable test cases and associated test data.

19.4.2.   Security Requirements

The Contractor must collaborate with MDHS to maintain compliance with the following standards and requirements:

- Internal Revenue Service (IRS) publication 1075 guide to maintaining enterprise security policies for Federal Tax Information (FTI) requests

- United States Privacy Act

- Federal Information Security Risk Assessment (ISRA) Procedures

- Records Usage, Duplication, Retention, Re-disclosure, and Timely Destruction Procedures/Restrictions 5 U.S.C. 552a (o)(1)(F), (H), and (I)

- Federal Information Security Management Act (FISMA)

- SSA Information System Security Guidelines for federal, State, and local agencies

- Confidentiality requirements under Section 471(a)(8) of the Social Security Act

- Confidentiality/access requirements under Section 106(b)(2)(a)(v) of the Child Abuse Prevention and Treatment Act

- OCSE Security Agreement

- 7 CFR 277.18(p) of the SNAP regulations

- Transport Layer Security (TLS) V1.2 specifications in order to interface with Federal Systems

- IRS Security Publication 1075

- Open Web Application Security Project (OWASP)

- USCDI United States Core Data for Interoperability (USCDI) | Interoperability Standards Advisory (ISA) (healthit.gov)

- American Recovery and Reinvestment Act (ARRA) of 2009

- NIST 800-53 Rev. 5

- NIST Cybersecurity Framework

- State Enterprise Security Policies

- Other new federal or State regulations as they arise

19.4.3. Production Support

The Contractor is responsible for the following aspects of MDHS System production support:

- Executing ad hoc production reports at MDHS' request

- Overseeing automated MDHS System reporting

- Tracking and reporting progress on all SRs and tickets

- Coordinating with MDHS to generate new queries and reports

- Monitoring daily jobs and reporting errors and failures

- Reporting batch and online execution statistics

- Refreshing the test and training environments as requested by MDHS

19.4.4. Help Desk Support

MDHS and the Contractor will share MDHS System Help Desk support. Each organization will provide a different level of Help Desk support to MDHS System users.

The Contractor will provide Level 3 Help Desk support for technical problems that MDHS cannot resolve. Problems that the Contractor Help Desk cannot resolve will be logged as tickets and follow the ticket resolution process.

19.4.5.　　Ticket Severities and Descriptions

Table 24 provides a description of the severities used to describe and prioritize MDHS System Help Desk support tickets. The severity levels are also used to categorize defects and are referenced in SLA04: Defect Remediation.

Table 24: Ticket Severity and Description

Severity Level		Description
S1	Critical	These tickets severely impede the processing of critical business activities. Tickets in this category typically impact large numbers of clients or workers, corrupt client or system data, prevent critical business processes from processing, and/or require substantial manual effort to work around or recover. Critical tickets do not have a practical work-around. These tickets can result in the following serious cost impacts to the State: • Serious application failure or slow response time delays application entry, processing, and/or receipt of benefits for large numbers of clients • MDHS incurs an unplanned, large expense to recovery from a system problem • MDHS must authorize staff overtime, cancel or deny employee leave requests, and/or hire additional resources • Press releases and social media broadcasts criticize MDHS' delivery of services and damages MDHS' reputation.
S2	High	These tickets impede the processing of business activities, but not at the same magnitude as critical tickets. These tickets might prevent a client's ability to apply for or receive benefits, often require data fixes using database utilities or emergency builds and, therefore, are immediately assigned to the support team and may have a temporary work-around that allows important business processes to proceed without major disruption to client services or only occur for a short time. High tickets might also impact small numbers of workers and clients, as follows: • System failures prevent workers from performing important aspects of their jobs

Severity Level		Description
		• Significant numbers of clients cannot submit an accurate application and receive a timely determination of benefit eligibility • The error causes compliance and QC errors • Client communications relay or request incorrect information • System inefficiencies significantly increase processing cost and time • Correction of corrupt or inaccurate client data • Consolidation and elimination of duplicate client records • System and/or data changes that allow stuck or incorrect communications to be issued/reissued correctly
S3	Medium	These tickets are troublesome to users or clients, but they do not prevent workers from performing their primary job responsibilities. They might corrupt data that is necessary but will not result in incorrect benefit determination. These tickets typically have a manual or system work-around, which is acceptable for potentially several months, but ultimately, they must be fixed to avoid worker and client complaints, as follows: • Workers and clients manually enter data that should be automatically updated • A supervisor override or incorrect data entry is necessary to avoid the problem • The correct/desired (not mandatory) process is not cable of being performed • Noncritical functions are slow or cumbersome to perform
S4	Low	These tickets are often cosmetic in nature and do not significantly impact the users' ability to use the system, prevent delivery of client services, or impacts a small number of users and/or clients. These types of tickets commonly have the following types of problems: • Spelling and grammatical errors on web pages, reports, notices, and all messages

Severity Level	Description
	• Web navigation and noncritical screen functions that do not work as defined, but also do not prevent the user or client from completing the process being performed • Access to system functionality that is beneficial, but not required, such as help text, inquiry screens, and noncritical reports • Formatting and display problems with web pages, notices, reports, and other outputs that do not prevent important information from being shared • A user has a question or request for technical assistance • Responses to worker, assistor, or client requests for information

19.4.6.   Software Upgrades

The Contractor must upgrade and test Contractor-implemented third-party software in all MDHS System environments. MDHS requires that the Contractor maintain all third-party software that is not maintained by MDHS at a release level no older than one release prior to the current production release, in compliance with SLA14: Technical Debt.

The Contractor must also ensure all Contractor-implemented third-party software system documentation is current as of the version in production.

20. Transition Out Services

20.1.　Overview

Transition out services describe the Contractor's responsibility for transition of O&M services for the MDHS System to MDHS or its designee(s) (e.g., an incoming vendor prior to termination of the Contractor's Contract for O&M services.)

MDHS' O&M solicitation will include a requirement that after Contract award, the incoming O&M vendor will deliver a proposed Transition Plan to MDHS. The Contractor shall have the opportunity to review, comment, and recommend changes to the Transition Plan. The Contractor and incoming vendor must work in good faith to complete a successful and effective transition. The Transition Plan shall be mutually agreed upon by MDHS, the incoming vendor, and the Contractor, as to content, scope, responsibilities, and timeline for completion. Should all parties not be able to arrive at a mutually agreeable Transition Plan, MDHS and a representative from both the Contractor and the incoming vendor will review and resolve disputed areas of the Transition Plan.

MDHS' O&M solicitation will include a requirement that, in the event the incoming vendor hires staff from the Contractor that are critical to completion of transition activities assigned to the Contractor, those transition activities shall become the responsibility of the incoming vendor, unless otherwise agreed to or compensated for by the parties.

To ensure Contract performance throughout the transition period, fifteen percent (15%) of the monthly invoice amount for services will be withheld, by MDHS, from payments starting the first month of the approved Transition Plan and continuing until thirty (30) days after the last transition deliverable is accepted by MDHS. Payment of the withheld amount will not be unreasonably withheld by MDHS.

20.2.　Objective

In the event the Contractor is not awarded a Contract through the O&M solicitation, transition out services ensure the Contractor effectively transitions operational support of the MDHS System to MDHS or its designee(s). The Contractor must provide the appropriate level of knowledge and skills transfer to the incoming vendor to perform O&M and enhancements for the MDHS System. The Contractor must provide full support and assistance in turning over the fully implemented and federally certified MDHS System to MDHS or its designee(s).

20.3.　Contractor's Responsibilities

Detailed requirements for fulfilling Transition Out Services are included in Table 25.

Table 25: Detailed Requirements for Transition Out Services

Req. ID	Requirement Description
TO-01	The Contractor must appoint an appropriately skilled resource to manage and coordinate all transition task activities.
TO-02	The Contractor must maintain pre-transition operational performance levels during the transition period, unless the Contractor receives prior written approval by MDHS
TO-03	The Contractor must begin planning transition efforts nine (9) months prior to the end of the Contract term, and transition activities must begin no later than six (6) months prior to the end of the Contract term, or within three (3) months of MDHS' notice of the Contract termination.
TO-04	The Contractor must ensure program stakeholders do not experience any adverse impact from the transfer of services. This includes, but is not limited to: a) Refraining from transitioning key personnel from the project without MDHS approval b) Maintaining O&M staffing levels until the formal Contract end date, unless MDHS provides approval c) Notifying MDHS of termination or resignation of any key personnel d) Providing replacement key personnel in alignment with SLAs e) Implement a QA process to monitor Transition Out activities. f) Responding within MDHS-approved timeframes to all MDHS requests regarding transition-out information
TO-05	The Contractor must develop an Operations Transition Plan (T1) that must consist of the following: a) Contractor's approach to MDHS System transition b) Contractor and MDHS resource requirements, roles, and responsibilities c) Phases, tasks, and subtasks for MDHS System transition d) Schedule for MDHS System transition, including the date that transition activities will begin and a reasonable completion date e) Develop a detailed work plan that shows the tasks to be completed by the incoming vendor, State staff, and the Contractor f) A designation of whether the tasks assigned to the Contractor are optional or necessary to ensure an effective transition of the O&M of the MDHS

Req. ID	Requirement Description
	System without disruption of services to the MDHS System's clients and workers. MDHS will make the final decision of who will perform the optional tasks g) A plan for knowledge transfer and training from the Contractor to MDHS' assigned resources to prepare them to support the MDHS System, including a description of how: i. The Contractor will embed MDHS' assigned resources with the Contractor staff throughout transition ii. The Contractor will supervise and provide independent design and development work to MDHS' assigned resources iii. The Contractor will provide MDHS' assigned resources in-depth training, review of the source code where applicable, and the base framework used for the design, development, configuration and customization of the MDHS System as it exists at the time of the transition iv. The Contractor will provide MDHS' assigned resources detailed training sessions on the current database design and the all database objects v. The Contractor will provide MDHS' assigned resources comprehensive training on the structure and architecture of the MDHS System, including hands-on design, development, configuration assignments and operations service delivery vi. The Contractor will evaluate the training, validate knowledge transfer, and re-train where necessary
TO-06	The Contractor must implement the Operations Transition Plan (T1) and provide Transition Support (T4), including effectively delivering or transferring to the MDHS the following: a) All contents of the collaborative workspace in a format acceptable to MDHS b) Updated and final submittals of all DDI and O&M deliverables c) Help desk tickets and electronic problem log reports dating to the beginning of the project

Req. ID	Requirement Description
	d) Help desk tickets, change orders, and other MDHS System changes that are underway, and the work needed to complete these items
	e) Security processes and tools, including security and password controls
	f) Support and corrections for any defects that existed in the MDHS System prior to the final transition date, or that caused by lack of support during transition; and
	g) MDHS System Inventory (T3) of project deliverables, artifacts, and/or other documentation
TO-07	The Contractor must develop an Operations Transition Results Report (T2) that documents the transition of MDHS System O&M from the Contractor to the MDHS' O&M team. The Operations Transition Results Report (T2) must consist of the following: a) Description of how the MDHS System was transitioned, including the use of any phases, tasks, and subtasks b) Confirmation the completed schedule indicates all tasks have been completed c) Description of how the MDHS System support requirements, as indicated in the Operations Transition Plan, were satisfied d) Description and confirmation of the satisfactory completion of the required training and creation of a new, proficient O&M team capable of providing effective MDHS System O&M services e) Description of how contents of the Collaborative workspace were turned over to MDHS f) Description of how the archived Help Desk tickets and log reports were turned over to MDHS g) Description and delivery of any outstanding Help Desk tickets, change orders, or other MDHS System changes during the transition phase and how they were resolved in collaboration with MDHS h) Description of how the security processes and tools were transferred to MDHS i) Description of how support and corrections were accomplished for any defects that existed in the MDHS System prior to the final transition date

Req. ID	Requirement Description
TO-08	The Contractor must support an effective transition of all MDHS System data, approved infrastructure, software, and documentation and the knowledge and procedures necessary for MDHS' assigned resources to perform MDHS System O&M and enhancements.
TO-09	The Contractor must provide 120 business days of post-transition out support to address technical questions from MDHS or its designee for the MDHS System O&M.
TO-10	The Contractor cannot restrict or prevent its staff from accepting positions from MDHS or its designee. MDHS will work with the Contractor for any transition of the Contractor's staff.

21.SLAs

21.1. DDI SLAs

Table 26 provides DDI SLAs that MDHS will hold the Contractor accountable for during the term of the DDI phases of the Contract.

Table 26: Contractor DDI SLAs

SLA #	SLA Name	Performance Standard	Penalty
SLA01	Project Work Plan and Schedule	The Contractor must develop, manage, and keep current a Project Work Plan and Schedule throughout the project. The Project Work Plan and Schedule must show summary tasks for all project phases and sub-phases. The Project Work Plan and Schedule must show detailed work tasks with dependencies, level of effort labor estimates, and percent complete for ninety (90) calendar days in the future. The Contractor must include all MDHS' tasks the Contractor expects MDHS staff to participate in or wholly own. MDHS' tasks must clearly show whether the task is on the project critical path. All project deliverables must have associated development and revision tasks, as well as tasks for submission and final acceptance. The Contractor must clearly identify additional tasks that specify the start/finish and duration of MDHS' initial and final deliverable review. The Contractor must update the Project Work Plan and Schedule so that it is current and accurate.	Failure to remedy within ten (10) business days of notification will result in a penalty of $5,000 per month. The penalty will start the month following MDHS' notification to the Contractor of the schedule corrections required and continue until the requested schedule changes are approved by MDHS.

SLA #	SLA Name	Performance Standard	Penalty
		The Contractor must correct historical and future tasks and milestones with significant errors, omissions, and inaccuracies as identified by MDHS within ten (10) business days of notification.	
SLA02	Project Deliverables	The Contractor must provide deliverables in alignment with agreed-upon levels of completeness and quality, as defined in the DED, and otherwise achieve the agreed-upon purpose of the deliverable in accordance with the Contract. The Contractor must complete all deliverables in accordance with the approved project schedule. The Contractor must submit requests for changes to the original MDHS-accepted project schedule, and MDHS must approve changes at least five (5) days prior to the initial deliverable submission date. MDHS will reject deliverables that do not align with the DED and do not contain the agreed-upon content (as specified by MDHS in the associated Deliverable Acceptance Form), or that are more than two (2) weeks late in delivery, or that contain significant spelling, grammatical, and formatting errors.	Failure to resubmit a deliverable within five (5) days of rejection and/or make the changes requested by MDHS. MDHS will calculate and assess a penalty of $1,000 for each calendar day, or part of, with a monthly cap of $10,000 per deliverable.
SLA03	Key Personnel	The Contractor must develop and retain qualified and experienced staff for the duration of the Contract. MDHS recognizes that some staff turnover is	Failure to fill key personnel roles with equivalent staff after a thirty (30)-day grace

SLA #	SLA Name	Performance Standard	Penalty
		inevitable, but expects that replacement key personnel are sufficiently qualified and experienced to continue DDI and O&M support without disruption in service. MDHS will use the minimum number of years of directly relevant experience, minimum education level, and any other qualifications (certifications, specialized training, skills, etc.) specified in the Contractor's proposal to the RFP for each key personnel member as the standard that all subsequent replacement staff members must meet. Regardless of qualifications, one (1) staff member may not temporarily or permanently occupy more than one (1) key personnel role in the same project phase (i.e., DDI and O&M). If a permanent, qualified replacement is not available, then the Contractor must name an interim replacement within ten (10) business days of the Contractor being informed of a key personnel position departure. The Contractor must assign a permanent replacement staff member to the Contract full-time within thirty (30) business days after the interim replacement is assigned. The permanent replacement must meet the minimum qualifications for the position as described in the Contractor's proposal to the RFP.	period will result in a monthly penalty. MDHS will not prorate monthly penalties by the days vacant during the month: Key Personnel: • Project Manager $20,000/month • Other Key Roles $10,000/month

SLA #	SLA Name	Performance Standard	Penalty
SLA04	Defect Remediation	The Contractor must develop and provide a monthly Defect Remediation Report to include, but not be limited to: • The number of resolved and unresolved (not fixed in production) defects for each defect category • The start date for each defect • The number of defects that exceeded the aging performance standards for resolution within the reporting period	Failure to resolve defects in accordance with the defect aging performance standards will result in a penalty. MDHS will assess penalty amounts relative to the defect severity category when a defect exceeds aging performance standards as of the end of the final calendar day each month: Severity, Maximum Age, Penalty per each Defect per Occurrence S1, Critical, >1 hour, $10,000 or cost of actual damages, whichever is higher S2, High, >24 hours, $7,500 S3, Medium, >48 hours, $5,000 S4, Low, >6 days, $2,500

21.2.   O&M SLAs

Table 27 provides O&M SLAs that MDHS will hold the Contractor accountable for during the term of the O&M phase of the Contract.

Table 27: Contractor O&M SLAs

SLA #	SLA Name	Performance Standard	Penalty
SLA05	System Availability	The Contractor must maintain a high degree of MDHS System availability	Failure to maintain availability of critical MDHS

SLA #	SLA Name	Performance Standard	Penalty
		for users and clients who rely on web and other online components to perform their daily business functions. The Contractor must help ensure critical system components (e.g., application entry, client portal sign-on, etc.) are available to clients and workers at all times per week (12:00 a.m. Monday – 11:59 p.m. Sunday) for application processing (e.g., document generation, document management, eligibility determination, and benefit issuance). The Contractor must report on the following information in the monthly O&M Status Report: • Each segment of downtime minutes by day during the scheduled availability period • Components affected by each segment of downtime • Environment(s) involved in downtime (test, training, staging, etc.) • Weekly total of downtime minutes occurring for the week during scheduled availability periods • Cause of downtime	System components with an uptime rate of 99.5% or greater per week will result in a penalty of $1,000 for each minute below the 99.5% uptime requirement. MDHS will assess an accumulated penalty for any given month of no more than $100,000 for the month. At its discretion, MDHS may choose not to assess a penalty for any portion of unplanned downtime that MDHS deems is not a result of Contractor performance failure (e.g., sustained power outage).
SLA06	Response Time	The Contractor must ensure MDHS System response times do not exceed 1,000 milliseconds for more than three (3) continuous minutes during normal business hours. To measure	Failure to ensure application response times do not exceed 1,000 milliseconds for more than three (3) minutes will

SLA #	SLA Name	Performance Standard	Penalty
		system response time, the Contractor will use a performance monitoring tool that reports client delay, network delay, server delay, and application delay as separate statistics. On a weekly basis, the Contractor will develop and provide to MDHS a Weekly Application Response Time Report showing the prior week's application response time, including but not limited to: • Each segment of MDHS System response times that exceeded the standard of 1,000 milliseconds for more than three (3) minutes • Components affected by the system response time delays • Total number of minutes during the period where system response times exceeded the standard	result in a penalty. MDHS will assess a penalty of $500 for each minute of sustained delay time in excess of 1,000 milliseconds beyond three (3) continuous minutes of application delay.
SLA07	Disaster Recovery	The Contractor must ensure the backup data center and MDHS System are fully operational within two (2) hours of the declaration of a disaster event by a duly authorized representative of either party, based upon determination that the production environment will be unavailable for a period of more than eight (8) hours during normal business hours. The definition of fully operational	Failure to provide a fully operational backup data center and MDHS System within two (2) hours of the declaration of a disaster event will result in a penalty. MDHS will assess a penalty that coincides with penalty provisions stated in SLA05 for all production downtime that occurs after

SLA #	SLA Name	Performance Standard	Penalty
		includes, but is not limited to: • Clients can enter application data and submit applications • Workers can process applications and disposition a case • MDHS System and worker-generated communications are functioning properly • Documents can be uploaded and displayed • All external interfaces necessary to process applications are operational The Contractor is responsible for all costs associated with manual and automated restoration of the data and MDHS System software at the disaster recovery site and restoring the production environment.	the two (2)-hour recovery target date and time. The Contractor will also be responsible for any penalties or fines assessed to MDHS, the cost of MDHS and Contractor litigation, court judgments, and awards resulting from the incident, if the disaster event is determined to have been caused by, or due to negligence on the part of, the Contractor. MDHS System failures caused by MDHS or other authorized third parties will not result in a penalty to the Contractor.
SLA08	Security	The Contractor must not allow MDHS System failure or exposure, release, or loss of PII and/or data protected under federal regulations. The Contractor must contain MDHS System data and minimize downtime resulting from such exposure, release, or loss of PII or protected data. An authorized representative of the Contractor or of MDHS must declare an Acute System Interruption (ASI) event when a determination is made that an attack on any MDHS System	Failure to secure PII or protected data under federal regulations contained in any MDHS System environment will result in a penalty. MDHS will assess a penalty that coincides with penalty provisions stated in SLA05 for all production downtime resulting from a security incident. The Contractor will also be responsible for all recovery

SLA #	SLA Name	Performance Standard	Penalty
		environments containing PII or protected data is imminent, in progress, or has been breached by an unauthorized third party. Upon declaration of an ASI event, the Contractor and MDHS will mutually develop a corrective action plan (CAP) that might or might not include transition to the disaster recovery site, or act to take one (1) or more of the MDHS System environments offline, performing system restore(s) and other actions deemed necessary to protect the system and data.	costs, federal and State penalties, court judgments, and associated financial awards to clients in the event of such exposure, release, or loss.
SLA09	O&M Key Personnel	The Contractor must develop and retain qualified and experienced staff for the duration of the Contract, in order to consistently provide a high level of O&M support for the MDHS System. MDHS recognizes that some staff turnover is inevitable, but expects that replacement key personnel are sufficiently qualified and experienced to continue MDHS System O&M support without disruption in service. MDHS will consider the Contractor's proposal to the RFP for each key personnel member's minimum number of years of directly relevant experience, minimum education level, and any other qualifications (certifications, specialized training, skills, etc.) as the standard that all subsequent replacement staff	Failure to fill key personnel roles with equivalent staff after a thirty (30)-day grace period will result in a monthly penalty. MDHS will not prorate monthly penalties by the days vacant during the month: • O&M key personnel point of contact, $15,000/month • Key personnel positions, $5,000/month MDHS will not prorate monthly penalties according to the days a position is vacant or under-filled. MDHS will assess a penalty for the full month

SLA #	SLA Name	Performance Standard	Penalty
		members must meet. MDHS will consider any key personnel position filled with an unqualified staff member as being under-filled, and so, not meeting the standard as a qualified replacement. Regardless of qualifications, one (1) staff member cannot temporarily or permanently occupy more than one (1) key role in the same project phase (DDI, O&M). The Contractor must name an interim replacement within ten (10) business days of being informed of a key personnel position departure and have a permanent replacement staff member assigned full-time to the Contract within thirty (30) business days after the position is vacated. The permanent personnel replacement must meet the minimum qualifications for the position as described in the Contractor's proposal to the RFP.	regardless of the number of days the position is vacant or under-filled during the month.
SLA10	Reporting	The Contractor must ensure reporting meets the following availability performance standards: • Daily reports are accessible to users by 7 a.m. Central Time on the next business day • Weekly reports are accessible to users by 7 a.m. Central Time on the next business day after the scheduled run • Monthly reports are	Failure to meet reporting availability performance standards within four (4) hours of the scheduled report delivery time will result in a penalty. MDHS will assess a penalty for each scheduled required report not provided within four (4) hours of the scheduled

SLA #	SLA Name	Performance Standard	Penalty
		accessible to users by 7 a.m. Central Time on the next business day following the end of the month • Quarterly reports are accessible to users by 7 a.m. Central Time on the next business day following the end of the quarter • Annual reports are accessible to users by 7 a.m. Central Time on the next business day following end of the year (federal fiscal year [FFY], State fiscal year [SFY], and other annual cycles) • Federal and State reports and data files are produced and submitted as required per regulation and by MDHS	delivery time according to the following scale: • $500 per occurrence for each Daily, Weekly, Monthly, and Quarterly Report • $1,000 per occurrence for each Annual and Federal Report
SLA11	Critical Incident Response	The Contractor must notify MDHS of production problems identified as S1 (Critical) within fifteen (15) minutes of the time the Contractor becomes aware or is notified of the problem. The Contractor must then provide MDHS an initial assessment of the S1 (Critical) production problem within sixty (60) minutes of initial notification, either verbally or by email. The Contractor must ensure resolution of the S1 (Critical) production problem within two (2) calendar days of initially notifying	Failure to meet the timelines for initial notification, initial assessment, resolution, and status reporting will result in a penalty of $3,000 per day, per incident for the Contractor's failure to meet S1 incident notification and resolution time frames.

SLA #	SLA Name	Performance Standard	Penalty
		MDHS of the problem. The Contractor must report incident status to MDHS every four (4) hours from at 6 a.m. through 10 p.m. Central Time until the incident is resolved.	
SLA12	Corrective Action Plans	When the Contractor fails to achieve an SLA performance standard two (2) out of three (3) consecutive months, MDHS will request that the Contractor submit a written CAP to MDHS. The Contractor must submit a written CAP no later than ten (10) business days from the date that MDHS requests the CAP. MDHS will consider extensions to the ten (10)-day CAP timeline on a case-by-case basis. The CAP must include the following: o A list of the deficient SLA(s) o A full explanation of each SLA failure o A root cause analysis of each SLA failure o A client, worker, and/or technical impact assessment (past and future) of the SLA failure o The Contractor-proposed corrective action that includes a timeline and resources required (Contractor and MDHS staff, equipment, software, etc.)	Failure to meet the submission timeline for a requested CAP will result in a penalty. MDHS will assess a penalty of $1,000 per day that the CAP submission exceeds the submission deadline of ten (10) days (or extended timeline, if MDHS has approved an extension for submission of the CAP).

SLA #	SLA Name	Performance Standard	Penalty
		MDHS must approve the Contractor's CAP prior to the Contractor implementing the proposed corrective action.	
SLA13	O&M Requirements	The Contractor must provide a high level of O&M services for the MDHS System for the duration of the O&M Contract. MDHS has specified its understanding of what a high level of O&M services entails in O&M requirements. The Contractor must fulfill these O&M requirements. MDHS will monitor the Contractor's compliance with these ninety (90) O&M requirements and provide notification to the Contractor in a monthly report that specifies all requirements the Contractor has failed to meet during the month. The Contractor must remedy the failure to comply with the reported O&M requirements during the following month. Continued failure of any of the notified requirements in the following month might result in a penalty assessment.	Failure to comply with five (5) or more O&M requirements in any given month will result in a penalty. MDHS will assess a penalty of $2,000 for each of the five (5) or more requirements that are noncompliant in the month following notification.
SLA14	Technical Debt	The Contractor must maintain all third-party software at a release level no older than one (1) release prior to the current production release in the production environment.	Failure to maintain all third-party software products at the current minus one (1) release level will result in a penalty of $5,000 per month for each third-party software that is

SLA #	SLA Name	Performance Standard	Penalty
		In addition, the Contractor must annually use an industry-standard code analysis program approved by MDHS to inspect and identify poor coding practices, dead code, antiquated and previously deprecated code, functions, method, and APIs. The Contractor must develop a code correction plan for the identified problems. The Contractor must specify the schedule for performing the upgrades and code corrections in the O&M schedule. The Contractor must include the cost of this remediation work in its proposed annual O&M price.	not current in the production environment. Failure to annually identify poor and antiquated coding practices or failure to correct them within six (6) months of identification will result in an annual penalty of $250,000.
SLA15	Batch Processes	The Contractor must ensure all batch processes, including interfaces, complete by 7 a.m. Central Time on the next business day.	Failure to meet the completion performance standard will result in a penalty. MDHS will assess a penalty for each scheduled required report not provided within four (4) hours of the scheduled delivery time according to the following scale: • $500 per occurrence for each daily, weekly, monthly, and batch process. • $1,000 per occurrence for each annual and Federal

SLA #	SLA Name	Performance Standard	Penalty
			batch process.

22. Summary of Contractor Deliverables

22.1. DDI Deliverables

Table 28 provides a summary of Contractor DDI deliverables described in Item 16, DDI Services. MDHS may require that the Contractor create additional project artifacts to support the DDI, such as release notes. The Contractor must update deliverables for each implementation, as appropriate and necessary.

Table 28: DDI Deliverables

ID	Deliverable	Minimum Update Frequency	Due Date	RFP Section Reference
D1	Project Management Plan	As needed	Thirty (30) business days after project start	B. Task 1: Requirements Analysis and System Design
D2	Project Work Plan and Schedule	Monthly	Thirty (30) business days after project start	B. Task 1: Requirements Analysis and System Design
D3	Kickoff Presentation and Meeting	One time (per implementation phase)	Ten (10) business days after project start for each implementation phase	C. Task 2: System Development and Configuration
D4	Project Status Reports	Weekly	To be determined during project initiation	C. Task 2: System Development and Configuration
D5	OCM Plan	Monthly	To be determined during project initiation	D. Task 3: Data Conversion and Migration
D6	Software Development Guide	As needed	To be determined during project initiation	D. Task 3: Data Conversion and Migration

ID	Deliverable	Minimum Update Frequency	Due Date	RFP Section Reference
D7	MDHS System RTM	As needed	To be determined during project initiation	D. Task 3: Data Conversion and Migration
D8	System Architecture Document	As needed	To be determined during project initiation	E. Task 4: Testing
D9	Functional System Design Document	As needed	To be determined during project initiation	E. Task 4: Testing
D10	Technical System Design Document	As needed	To be determined during project initiation	F. Task 5: UAT
D11	Database Development Plan	As needed	To be determined during project initiation	F. Task 5: UAT
D12	Security Plan	As needed	To be determined during project initiation	G. Task 6: ORT
D13	Business Continuity and Disaster Recovery Plan	As needed	To be determined during project initiation	G. Task 6: ORT
D14	Configuration Management Plan	As needed	To be determined during project initiation	G. Task 6: ORT
D15	Defect Remediation Report	Monthly	To be determined during project initiation	H. Task 7: User Training
D16	Data Conversion and Migration Plan	As needed	To be determined during project initiation	H. Task 7: User Training

ID	Deliverable	Minimum Update Frequency	Due Date	RFP Section Reference
D17	Data Conversion and Migration Test Plan	As needed	To be determined during project initiation	H. Task 7: User Training
D18	Data Conversion and Migration Test Results Report	As needed	To be determined during project initiation	H. Task 7: User Training
D19	Test Plan	As needed	To be determined during project initiation	I. Task 8: Implementation Planning and Execution
D20	System Test Documentation and Results Report	As needed	To be determined during project initiation	I. Task 8: Implementation Planning and Execution
D21	UAT Plan	As needed	To be determined during project initiation	I. Task 8: Implementation Planning and Execution
D22	UAT Results Report	Weekly	To be determined during project initiation	J. Task 9: DDI Closeout
D23	ORT Playbook	As needed	To be determined during project initiation	B. Task 1: Requirements Analysis and System Design
D24	ORT Operational Readiness Test Results and Readiness Assessment	One time (per increment)	To be determined during project initiation	B. Task 1: Requirements Analysis and System Design
D25	ORT System Demonstration	One time (per increment)	To be determined during project initiation	C. Task 2: System Development and Configuration

ID	Deliverable	Minimum Update Frequency	Due Date	RFP Section Reference
D26	Training Materials	As needed	To be determined during project initiation	C. Task 2: System Development and Configuration
D27	Training Plan	Quarterly	To be determined during project initiation	D. Task 3: Data Conversion and Migration
D28	User Training Report	As needed	To be determined during project initiation	D. Task 3: Data Conversion and Migration
D29	Train-the-Trainer Trainer Training	One time (per increment)	To be determined during project initiation	D. Task 3: Data Conversion and Migration
D30	Implementation Readiness Assessment	Prior to production pilot and again prior to implementation	To be determined during project initiation	E. Task 4: Testing
D31	Implementation Plan	As needed	To be determined during project initiation	E. Task 4: Testing
D32	Implementation Report	As Needed following rollout	To be determined during project initiation	F. Task 5: UAT
D33	DDI Closeout Report	One time (per increment)	Fifteen (15) business days before Contract end date	F. Task 5: UAT

22.2.   SI Deliverables

Table 29 provides a summary of Contractor SI deliverables described in Item 17, SI Services. The Contractor must update deliverables for each implementation, as appropriate and necessary.

Table 29: SI Deliverables

#	Deliverable	Minimum Update Frequency	Due Date	RFP Section Reference
S1	Data Management Plan	As needed	To be determined during project initiation	IV. SI Services
S2	Data Retention Plan	As needed	To be determined during project initiation	IV. SI Services
S3	System Integration Plan	As needed	To be determined during project initiation	IV. SI Services

22.3.   O&M Deliverables

Table 30 provides a summary of the Contractor O&M deliverables described in Item 18, O&M Services and Enhancements. The Contractor must also update and maintain deliverables developed during DDI that are also required to support O&M and enhancements. MDHS may require that the Contractor create additional project artifacts to support O&M, such as release notes.

Table 30: O&M Deliverables

ID	Deliverable	Minimum Update Frequency	Due Date	RFP Section Reference
O1	O&M Plan	Annually	Thirty (30) business days after planned start date	V. O&M Services and Enhancements
O2	O&M Work Plan and Schedule	Monthly	Thirty (30) business days after planned start date	V. O&M Services and Enhancements
O3	O&M Status Report	Monthly	Five (5) business days after the last day of each month	V. O&M Services and Enhancements

ID	Deliverable	Minimum Update Frequency	Due Date	RFP Section Reference
O4	Job Exceptions Report	Monthly	Five (5) business days after the last day of each month	V. O&M Services and Enhancements
O5	Infrastructure and System Software Support Plan	Annually	Thirty (30) business days prior to the planned start date	V. O&M Services and Enhancements
O6	Defect Remediation Report	Initially developed during DDI; monthly thereafter	Five (5) business days after the last day of each month	V. O&M Services and Enhancements
O7	Security Documentation and Security Test	Initially developed during DDI; updated annually thereafter	Prior to one (1) year after the implementation date and every year thereafter	V. O&M Services and Enhancements
O8	Business Continuity and Disaster Recovery Plan	Initially developed during DDI; updated annually thereafter	Prior to one (1) year after the implementation date and every year thereafter	V. O&M Services and Enhancements
O9	Disaster Recovery Test	Annually	Prior to one (1) year after the implementation date and every year thereafter	V. O&M Services and Enhancements
O10	Training Materials	Initially developed during DDI; updated with each SR that impacts user training	30 business days prior to the planned implementation date	V. O&M Services and Enhancements

ID	Deliverable	Minimum Update Frequency	Due Date	RFP Section Reference
O11	Federal Certification and Review Management Plan	One time	To be determined during project initiation	V. O&M Services and Enhancements
O12	Federal Certification and Review Supporting Documentation	As needed	To be determined during project initiation	V. O&M Services and Enhancements

22.4.   Transition Deliverables

Table 31 provides a summary of the Contractor transition deliverables described in Item 19, Transition Out Services.

Table 31: Transition Deliverables

ID	Deliverable	Minimum Update Frequency	Due Date	RFP Section Reference
T1	Operations Transition Plan	One time	Six (6) months prior to Contract end date, or within fourteen (14) days of notice of Contract termination	VI. Transition Out Services
T2	Operations Transition Results Report	One time	Fifteen (15) business days before Contract end date	VI. Transition Out Services
T3	MDHS System Inventory	One time	Prior to the start of transition activities	VI. Transition Out Services
T4	Transition Support	One time	Prior to completion of the Contract	VI. Transition Out Services

Appendix A – Glossary of Acronyms and Terms

Table A1 includes a list of acronyms and terms used in Attachment A of the RFP.

Table A1: Glossary of Acronyms and Terms

Acronym/Term	Definition
Adabas	Adaptable Database System
ALM	Application Lifecycle Management
API	Application Programming Interface
ASI	Acute System Interruption
BBCE	Broad-Based Categorical Eligibility
CAP	Corrective Action Plan
CARS	Client Application and Registration System
CCPP	Child Care Payment Program
CCPS	Child Care Payment System
CCR&R	Child Care Resource and Referral
CIO	Chief Information Officer
COBOL	Common Business-Oriented Language
Contractor	Awarded vendor under contract with ITS
CRS	Case Review System
CSE	Child Support Enforcement
CSENet	Child Support Enforcement Network
CWP	Common Web Portal
DDI	Design, Development, and Implementation
DED	Deliverable Expectations Document
DECCD	Division of Early Childhood Care and Development
DRAAS	Disaster Recovery as-a-Service
DSNAP	Disaster Supplemental Nutrition Assistance Program
EBT	Electronic Benefit Transfer

Acronym/Term	Definition
E&T	Employment and Training.
EDP	Employability Development Plan
eFITS	Electronic Financial Interface Tracking System
EPPIC	Electronic Payment Processing and Information Control
ERD	Entity Relationship Diagram
ESB	Enterprise Service Bus
FEMA	Federal Emergency Management Agency
FFP	Federal Financial Participation
FISMA	Federal Information Security Management Act
FNS	Food and Nutrition Service
FTI	Federal Tax Information
IaaS	Infrastructure as a Service
iOS	iPhone Operating System
IT	Information Technology
ITS	Mississippi Department of Information Technology Services
ISRA	Information System Risk Assessment
IV&V	Independent Verification and Validation
IBM®	International Business Machines
IRS	Internal Revenue Service
IVR	Interactive Voice Response
JAD	Joint Application Design
JAWS	Jobs Automated Work System
JTD	Joint Technical Design
LARS	Licensing and Reporting System
LIHEAP	Low-Income Home Energy Assistance Program
MACWIS	Mississippi Automated Child Welfare Information System

Acronym/Term	Definition
MARS	Mississippi Application and Reimbursement System
MARS-E	Minimum Acceptable Risk Standards for Exchanges
MAVERICS	Mississippi Application, Verification, Eligibility, Reporting, & Information Control System
MCTS	Master Client Tracking System
MDHS	Mississippi Department of Human Services
MDM	Master Data Management
MEMA	Mississippi Emergency Management Agency
METSS	Mississippi Enforcement and Tracking of Support System
MIS	Management Information Systems
MOTS	Modified Off-the-Shelf
MPI	Master Person Index
MS	Microsoft
MyMDHS	My Mississippi Department of Human Services
NDNH	National Directory of New Hire
NIST	National Institute of Standards and Technology
NTE	Not-to-Exceed
O&M	Operations and Maintenance
OCM	Organizational Change Management
OCSE	Office of Child Support Enforcement
OIG	Office of Inspector General
ORT	Operational Readiness Testing
PII	Personally Identifiable Information
PaaS	Platform as a Service
PMO	Project Management Office
QA	Quality Assurance

Acronym/Term	Definition
QC	Quality Control
RBAC	Role Based Access Control
RFP	Request for Proposal
RTM	Requirements Traceability Matrix
SCM	Source Code Management
SFTP	Secure File Transfer Protocol
SI	Systems Integration
SLA	Service Level Agreement
SNAP	Supplemental Nutrition Assistance Program
SNAP E&T	Supplemental Nutrition Assistance Program Education & Training
SOW	Scope of Work
SQL	Structure Query Language
SSA	Social Security Administration
SSO	Single Sign-On
State	State of Mississippi
TANF	Temporary Assistance for Needy Families
TWP	TANF Work Program
UAT	User Acceptance Testing
USDA	United States Department of Agriculture
USPS	United States Postal Service
Vendor	Proposing organization

Appendix B – Program Data for Conversion

Table D1 provides the database size and number of records for MDHS' legacy IT systems.

Table D1: Legacy IT System Data

Legacy IT System	Database Size	Number of Records
METSS	715 GB	3,485,394,250
eFITS	118 GB	614,200,544
JAWS	17.2 GB	189,832,437
MAVS41	196 GB	1,862,667,678
MAVS45	33 GB	371,972,035
CCPS		

Attachment B – MDHS System RTM

The MS Excel file, Attachment B MDHS System RTM is posted on the on the same website location as RFP No. 4488, and the link is located directly beneath the link for RFP No. 4488.

Attachment C – Cost Proposal Template

The MS Excel file, Attachment C Cost Proposal is posted on the on the same website location as RFP No. 4488, and the link is located directly beneath the link for RFP No. 4488.